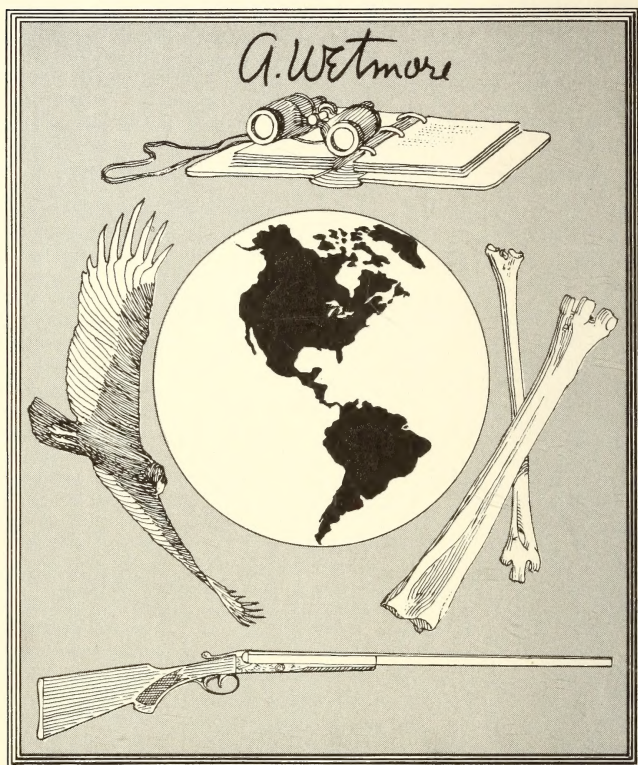




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A. Wetmore

TRAVELS
IN
BRAZIL,

IN 1815, 1816, AND 1817.

BY PRINCE MAXIMILIAN,
NUEWIED.

TRANSLATED FROM THE GERMAN,
AND
ILLUSTRATED WITH ENGRAVINGS.

LONDON:

PRINTED FOR SIR RICHARD PHILLIPS, AND Co.
BRIDE COURT, BRIDGE STREET.

1820.

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PREFACE

THE late war opposed, during a long series of eventful years, numerous obstacles to any attempt to extend the knowledge of Natural History and Geography by travels in foreign regions; but peace being at length restored, men, animated by the desire of making new discoveries in the domain of nature, have been enabled to undertake important Voyages and Journeys, and to communicate their success to their contemporaries. The change produced in Brazil by the residence of the royal family of Portugal, and the liberal disposition of the government, have lately attracted several travellers to that quarter. Mr. Mawe obtained permission to visit the rich diamond mines, to which no foreigner had before been admitted. Some Germans have since gone over the same ground. Lieutenant-colonel Von Eschwege has already favoured the public with some interesting treatises, and important discoveries may still be expected from this scientific observer. Through the recommendation of that enlightened minister the Conde de Barca, he was not only allowed to visit the different captainships of the monarchy, but received an annual sum to defray his expences. How different is this conduct from that formerly pursued by the Portuguese government, when every foreigner on his arrival was surrounded by soldiers, and jealously watched!

It would require several years to explore this great country, though Mawe and Eschwege have already travelled through *Minas Gerais*. I found it therefore most convenient to direct my attention to the east coast, which, if not entirely unknown, had hitherto remained undescribed. Several races of Indians inhabit this quarter, whose manners have not been affected by the intercourse of Europeans. The high naked ridge of mountains which passes through Brazil, is separated from the east coast by extensive forests, which stretch from *Rio de Janeiro* to *Bahia de todos os San-*

tos, and are not yet occupied by Portuguese settlers. He who would wish to study the aborigines, can only find them in their ancient state in these woods. Can it then be surprising that this region, which, besides, presents rich treasures to the botanist and entymologist, should prove the most attractive to a traveller who was not inclined to spend many years in so warm a climate?

The greatest inconvenience a traveller has to encounter in Brazil, is the impossibility of obtaining maps and charts. Arrow-smith's map is full of errors,—considerable rivers on the east coast are not marked, while, on the contrary, some are given where none exist; and thus the best map of Brazil is almost useless. To supply this deficiency, the Portuguese government lately ordered a survey of the coast to be made, in order that all dangers to which ships are exposed in those parts might be made known.

Two Germans, M. Freyreiss and M. Sellow, who are inclined to remain some years, in Brazil, and, still farther, to explore the country, have in the king of Portugal a generous protector. Persons better qualified for executing the task they have undertaken, could not easily be found, as they are intimately acquainted with the language and manners of the country, and well prepared by several years of previous travels. I had the advantage of their company in part of my excursion, and have to thank M. Freyreiss for much interesting information. This gentleman intends to transmit to me an account of his further travels and observations in natural history, and I shall esteem myself happy in having the opportunity of laying his discoveries before the lovers of scientific investigation. This book is, therefore, only the forerunner of more important communications, and farther observations will soon supply the deficiencies unavoidable in the following sheets.

N. B.—*The Part now published consists of the First Volume of the Author's Work, which is all that, at this date, (May 1820,) has appeared in Germany. As soon as the Second Volume appears, it shall be presented to the British Public in the same style as the present Number.*

TRAVELS
IN
THE BRAZILS.

CHAPTER I.

Voyage from England to Rio de Janeiro.

BRAZIL, to which a number of travellers have recently been attracted, has the advantage of being separated from Europe by a sea comparatively tranquil. At some periods, particularly at the equinoxes, that immense ocean is certainly subject to storms, but they are less dangerous than in other quarters, as for example; in the neighbourhood of the Cape of Good Hope and Cape Horn.

I left London at the most favourable season, and had therefore reason to anticipate an agreeable voyage. While our ship, the *Janus*, of 320 tons, dropped down the Thames, the weather was excellent. The morning of the second day promised a favorable wind, and we passed Margate, got round the North Foreland, entered the Channel, and towards evening anchored in the Downs, off Deal. Whilst we lay at anchor, the captain took on board fresh beef and sea stock of every kind. On the first change of wind we sailed round the South Foreland, under convoy of the *Albatros* brig, commanded by captain Harrison. The wind, however, became unfavourable, and we were obliged to put back to our old anchoring ground off Deal.

During the night a severe gale arose, and blew with such violence that it was found necessary to keep a great part of the hands on deck: the sky became gradually more and more overcast, till at length the South Foreland was almost totally obscured. The yards were struck and braced round to the wind. For several days the storm continued raging with more or less violence, and gave

the passengers, who had now for the first time become acquainted with the uncertain element on which we were embarked, no very agreeable foretaste of the pleasures of a sea-life. At length, when the wind became somewhat more favorable, a signal was made by a ship of war, and the whole fleet weighed anchor. But when evening set in, a new danger threatened us; the ships sailed so close to each other, that they were every moment on the point of running foul. At midnight we fortunately escaped from an accident which had well nigh proved fatal: a large ship in full sail nearly run us down, and passed close alongside, ere the darkness permitted any one on deck to discover the danger. As the violence of the wind continued to increase, we carried little sail. After suffering much from bad weather, we were at last enabled to continue our voyage, and pursue our destined course. We soon sailed past Dungeness, and the beautiful rocky coast of Beachy Head, a promontory in Sussex, between Hastings and Shoreham. At noon we had a view of Brighton, and in the evening, while the sea was tranquil and motionless, and the moon shone brightly, we came in sight of the Isle of Wight. The sailors now resumed their wonted cheerfulness, and the sound of the fiddle and the sprightly dance, soon banished all recollection of the dangers they had encountered.

On the morning of the 20th of May, we passed the Isle of Wight, and Portland Point, in Dorsetshire, which produces the beautiful stone used for building in England. At night another gale arose, which obliged us to stand out to sea, to avoid being wrecked on the rocky coast, and the wind was so heavy that one of our sails was torn from the mast. On the following evening, though the sea was rough, and the wind somewhat unfavourable, we entered the secure road of Torbay, which is broad, and surrounded by hills. Portland Point projects on the north, and the Start on the south. Here we determined to wait for better weather, and, if possible, to recover from the fatigue we had undergone; but two vessels bound for Brazil, with which we were to sail, fired a gun as the signal for their immediate departure, and we had not even time to finish the letters we were preparing to send on shore. Towards evening we sailed round Start Point; here a cluster of lofty and steep rocks form a kind of rude promontory, on the top of which is a level overgrown with verdure, such as appears along the whole coast of Devonshire. The hills seem partly tinged with yellow, owing to the great abundance of the flowers of the ulex, a shrub which is very common both in England and France. Little islands of rock are here and there visible above the surface of the sea, and with the white foaming waves breaking against them, form a picture which the rays of the departing sun now rendered the more beautiful. On the following morning we caught a distant glimpse of Fort Pendennis, not far

from Falmouth, and passing the Lizzard Point, which is distinguished by its two white light-houses, cleared the channel. On the 22nd of May we lost sight of land.

During our passage to Madeira, we frequently threw out lines and other fishing tackle, but we did not succeed in catching any thing, except the *trigla gurnardus*, a fish which eats very agreeably. Shoals of porpoises (*delphinus phocaena*, Linn.) frequently followed the ship, but we were not fortunate enough to catch any. We were also occasionally accompanied by the small black storm-bird (*procellaria pelagica*). At noon, on the 11th of June, we came within sight of the island of Madeira. At six in the evening we arrived off its western point, Ponta Pargo, which we doubled with a fresh gale. This island presents a most beautiful prospect: at a distance it appears like a mass of rock with its summit enveloped in clouds. On every side appear steep black coloured precipices, with deep clefts and hollows: the green tendrils of the vine are every where visible, and among them glisten here and there the white houses of the inhabitants. The summits of those hills which are not hidden by the clouds, are covered with verdure, and the little houses are shaded by clusters of lofty trees. In the fine climate of Madeira, the fruits of the torrid and the temperate zones are cultivated with equal success. Heavy rains must be frequent here, for the descending torrents of rain have in many places formed deep crevices in the rocks. The inhabitants, who amount to about eighty thousand, support themselves chiefly by the cultivation of the vine. Madeira also produces fine fruit, such as oranges, bananas, lemons, &c.

As we did not intend to visit Funchal, the capital of Madeira, we proceeded on our course, and soon lost sight of the island. A brisk trade-wind carried us rapidly past the tropic. Here multitudes of flying-fish hovered round the vessel. These animals became the more numerous as we approached the equator; before we reached the tropic we had seldom seen them.

On the 6th of June, when we passed the northern tropic, and for several succeeding days, we were much amused by the various animals of the molusca class, which made their appearance. At the 22° 17' north latitude, we saw for the first time the *physalis*, a very curious animal of this class*; it gradually appeared in greater numbers, and as we advanced, we frequently saw several hundred in a day. This curious animal has been noticed by many voyagers, and I was therefore much interested in being enabled to observe it minutely. The largest portion of the animal, which floats above the surface of the water, is a bladder filled with air: to the lower side of this bladder, eight or nine bunches of long fleshy fibres or tentacula are attached, which form short thick stems at the roots, where

* Concerning these Molusca, see the account of the Court Counsellor Silesius, in the third volume of Captain Krusenstern's Voyage round the World.

they are connected with the bladder. With these tentacula, which may be called the living part (for the bladder is not sensitive), the animal seizes its prey; they are capable of being lengthened or shortened, and are furnished with numerous suckers and papillæ. With regard to the bladder, I have not been able to discover any ducts or canals that open into it; this bladder does not alter after the death of the animal, and will retain its form even in spirits of wine. Its power of motion is very limited; it curls into the form of a crescent, and its two points incline either upwards or downwards. By this motion it supports itself when tossed about by the fury of the waves. The bladder itself occasions no pain to the touch; but the tentacula produce a burning smarting sensation. The *physalis* is called by the English, *the Portuguese man of war*; by the French, *galère*; and by the Portuguese, *agoa viva*, or *caravela*. As we approached the equator, the numbers of these mollusca diminished; but on the other hand, the *medusa pelagica* appeared very frequently. Sea-fowl also fluttered round the ship, and on one occasion, after a storm, the pilot caught a sea-swallow, (*sterna stolidus*, Linn.) in his hand. We also saw man of war birds (*pelicanus aquilus*, Linn.); which had been driven down from the neighbouring cliffs.

The weather was upon the whole favourable, while we passed the northern torrid zone: we had frequent showers of rain, but these were very acceptable, as our store of fresh water was by this time nearly exhausted. On the 22nd of June, the Janus passed the equator, when the seamen made us undergo the usual ceremony of a visit from Neptune. On the preceding evening, a deputy from the monarch of the ocean came on board, and conversed with the captain through a speaking trumpet. The flaming car in which he departed, consisted of a burning tar barrel, which formed a very pretty object as it receded in the darkness of the night.

After we crossed the equator, the weather became less favourable; we had frequent showers of rain, accompanied by heavy winds; the sea was often very rough, and we saw numbers of storm-finches, (*procellaria pelagica*) porpoises, and larger cetacea. We had now passed the 28° 25' west longitude from Greenwich; to avoid the rain and heavy winds which we had hitherto experienced, we now steered further westward, and this brought us into the currents which run towards the American coast.

On the morning of the 27th of June, while we were seated at breakfast, we were informed that we were in sight of land. Every one hastened on deck, and to our joy we beheld the beautiful coast of Brazil, rising above the surface of the ocean. We soon discovered two species of sea-weed, (*fucus*) and various other indications of our proximity to the coast, and at length we descried a fishing-raft, with three men on board. These rafts (*jangadas*) are formed of five or six trunks of a light kind of tree, called in Brazil *pao*

de jangado, of which a sketch may be found in Koster's travels in Brazil. These *jangadas* put to sea with great safety; they are used for fishing, and conveying various articles from one part of the coast to another, and they go very swiftly, as they are furnished with a stout sail fixed on a low mast. After our long voyage, we would gladly have taken in a supply of fresh fish, but this object was not sufficiently important to induce us to sail up to the *jangado*. We therefore steered in the direction of the coast, and about noon, had advanced so near it, that we could plainly recognize the district of *Goiana* or *Paraíba de Norte*, in the *Capetania* of Pernambuco. Our situation would have been very dangerous, had we approached thus near the coast during the night, and with a heavy wind; but fortunately we had still sufficient time to tack about and gain the open sea. However, a heavy gale, accompanied by rain, arose during the night, and we were obliged to beat about for several days. During this storm, the sea presented a terrific aspect; the roaring waves towered above the ship, and the interminable surface of the ocean seemed to be on fire. Thousands of light spots and streaks, and even extensive surfaces glistened around us, and every moment changed their form and situation. This light was exactly similar to that produced by damp decayed trees, so often seen in forests. Day after day the storm continued to rage with unabated fury. We had committed a great error in approaching so near the coast of Pernambuco, for storms are very frequent in these parts during the winter of the torrid zone. The captain put out to the open sea as well as the wind would permit, but we were constantly obliged to tack about, and made but little way. Finally, about eight days after we had first gained sight of land, the wind abated, and enabled us to take a more direct course. We occasionally measured the current of the sea, a precaution highly necessary, as we were steering very near the coast. Large sea-fowl, mews or petrels, hovered about the ship, but we were not able to shoot any. We also occasionally saw the *physalis*, and flying fish, and large cetacea spouted up the water through their spiracles.

At noon, on the 9th of July, we once more gained sight of the coast of Brazil, in the neighbourhood of *Bahia de todos os Santos*. We beheld beautiful chains of mountains, with thick clouds descending over their summits. We could plainly see that partial rain was falling, and at sea we experienced alternately heavy rain and wind. We had reason to expect that in the evening a smart gale would blow from the coast, and we sailed forward during the day; but as the weather proved tranquil, we again stood out to sea at night. On the 10th, the weather was fair, and the wind favourable. We had passed the dangerous rocky islands called *Abrolhos*, (which name is a contraction for *Abra os olhos*, open the eyes), and we could now steer in a direct course to *Cabo Frio*. In the 22° 23' south latitude, we observed a second species of *physalis*.

much smaller than the common kind, and without any red colour; it was doubtless the same which Bosc has described in the second volume of his *Histoire naturelle des Vers*. This animal appeared in vast numbers. The heat which we experienced at noon in these regions was most oppressive, and a single cup of tea threw us into strong perspiration. On the contrary, the nights were always of an agreeable temperature, and the light of the moon and stars was delightful. We now saw great quantities of fucus, plants of various kinds, fragments of trees, &c. and on the afternoon of the 14th. we gained sight of the promontory called *Cabo Frio*, with the little rocky island that lies before it. It was now seventy days since we had sailed from Gravesend, and we had yet a short voyage to perform ere we could reach *Rio de Janeiro*. In the morning we doubled *Cabo Frio* with a favourable wind, and on the 15th of July, we came in sight of the southern coast of Brazil, where the promontory separates the southern and eastern coasts. A brisk gale now agitated the sea, which here, as well as along the coasts of Europe, is tinged with a dark green hue. The hills of Brazil, which are of the most beautiful and varied forms, covered with verdure and trees, extend in an uninterrupted line along the coast. The primary mountains which we past, presented a singular variety of forms, being frequently conical or pyramidal; the clouds were descending over their summits, and a light fog or mist gave them a beautiful soft colour. At noon in the shade, and with a gentle wind, the thermometer stood at 19° Reamur (75° Fahrenheit), and during a calm which ensued in the evening, it was at 17° Reamur. The wind afterwards became more brisk, the ship sailed swiftly, and on the succeeding morning, we arrived at the mouth of the *Rio de Janeiro*.

During the calm, we continued for a considerable time tacking about, and made but little way. Before us lay the opening on the coast which leads to the city of *Rio de Janeiro*; In this opening there are numerous small rocky islands, some of which are very curiously shaped, and together with the distant clusters of hills along the coast, present a highly picturesque prospect. Among these hill, the sugar-loaf (*Pao de Assucar*) is distinguished on the left by its conical form, and on the opposite side appears the point of land on which stands the fort of *Santa Cruz*, erected for the protection of the capital.

About 11 o'clock the wind became calm, and the progress of the ship was scarcely perceptible, though all our sails were up. During this tedious interval we resolved to visit one of the rocky islands which were within sight. The captain, with a few sailors, got into the boat, and two of the passengers besides myself, accompanied them. After rowing for about half an hour, we lost sight of the Janus, and arrived at the *Ilha rasa*, the level island, so called to distinguish it from the *Ilha rotunda*. But here we

found it impossible to land, for the island was surrounded by steep broken pieces of rock, overgrown with zoophytes, which formed a complete net-work. We therefore contented ourselves with admiring the beautiful clusters of trees which were thickly entwined together on the level part of the island, and listening to the resounding notes of the birds. On the points of the rocks we observed numbers of white mews with black backs, which exactly resembled the *larus marinus* of the European seas. After staying about an hour, we rowed off from the island, and began to look out for the ship; but she was no longer visible. Our situation was now very critical; for at the entrance of the river there are currents which frequently carry vessels out of their course, by which many have been wrecked.* Our sailors contended for some time against the high swollen waves, without accurately knowing the course of the vessel. We rowed with all our might, and at length had the good fortune to discover the masts of the *Janus*. After we got on board, the wind continued so calm that we made but little progress. In the evening, however, we anchored in the narrow mouth of the great harbour of Rio de Janeiro, which was formerly called Ganabara by those tribes of the aborigines who resided here. The entrance to this harbour is extremely picturesque. It is surrounded on either side by steep rugged mountains, the summits of which present the most varied and singular forms, and almost all of which have particular names. Among them are two of similar form, distinguished by the name of the *Duos Irmaos* (the two brothers), another is called by the English the *Parrot-beak*, and at some distance from the shore rises the lofty *Corcovado*. We cast anchor at the distance of about a mile from the Fort, where we could command a view of the grand scenery which surrounded us. The lofty pointed hills are for the most part covered with trees, among whose dark green branches we could distinguish those of the stately slender coconut tree. Where the beams of the setting sun glistened on the surface of the sea, we could discern shoals of beautiful red coloured fish, which presented a most singular appearance. We amused ourselves by gathering sea-weed (*fucus*) and fishing for mollusca, till night-fall, when the heavy dew which is common in these regions obliged us to quit the deck.

Just as we were about to retire to rest a distant firing again induced us to mount on deck, and, at the further extremity of the

* A singular circumstance occurred shortly before our arrival. An American ship entered the river, and was followed by an English privateer. The American, for some time, appeared at a loss how to proceed, but she was at length obliged to sail, and the privateer wished to pursue and capture her. However, according to the Port-laws of Rio, every ship is allowed an interval of three hours before an enemy can pursue her. The privateer accordingly awaited the expiration of the three hours, and then put to sea with all her sails set. As soon as she arrived near *Ilha rotunda* she was becalmed, and the current dashed her against the rocks, where she was wrecked, and all the crew lost, while the American vessel had long before gained the open sea.

bay, where a number of large ships enabled us to guess at the situation of Rio de Janeiro, we beheld a display of brilliant fireworks. On the following morning, at sun-rise, we weighed anchor, and a gentle breeze soon carried us into the harbour. We all joyfully mounted the deck; the English flag waved above our heads, and all our sails were majestically set. A boat, rowed by eight Indians,* now made towards us, with two pilots on board, to bring the Janus, * now made towards us, with two pilots on board, to bring the Janus to anchor before the city of Rio. They brought with them proofs of the fertility of their country, namely, abundance of delicious oranges, which were heartily welcome to us, as we had not tasted fresh fruit during the seventy-two days that we had been at sea. We now gradually approached the city, sailing from one bank to the other of the narrow mouth of the bay. In the clefts of the hills we here and there perceived neat little houses, shaded by thickets, above which towered the stately branches of the cocoa tree. We sailed past numbers of small islands, on one of which Villegagnon built Fort Colligny, and which still bears his name. The French were driven from this place in 1560. We could now command a view of a great part of the Bay of Rio, bounded, in the distance, by lofty hills, among which the *Serra dos Orgaos* (the hill of organs,) is remarkable for its resemblance to the conical mountains of Switzerland. There are many small islands in this beautiful and secure harbour of the New World, which is defended on both sides by strong batteries. We were now directly opposite the city of Rio de Janeiro, or, properly, St. Sebastiam, which is built on several hills, close to the shore, and, with its towering churches and cloisters, forms a most beautiful prospect. Behind the city the landscape is terminated by conical topped hills, overgrown with trees and verdure, and, in the fore ground, multitudes of ships of all nations give animation to the scene; boats and canoes are constantly sailing to and fro, and the little coasting vessels of the neighbouring harbours fill up the intervals between the majestic three-masted ships of Europe.

We had no sooner cast anchor than we were surrounded by boats, some of which were filled with soldiers, who immediately came on board. The officers of the *Alfandego* (custom-house) then made their appearance. We were also visited by a commission of health, and other officers, whose business was to ascertain that the crew were in a healthy state, and to examine our passports; and lastly, a great number of Englishmen came on board, all eager to obtain news from their native country.

* The Portuguese call all the aborigines of Brazil Indians (*Indios*), as we erroneously apply the name of Indians to all the tribes of the vast continent of America.

CHAPTER II.

RESIDENCE IN RIO DE JANEIRO.

The City and its Environs.—The Indians of St. Lourenzo.—Preparations for a Journey up the Country.

RIO DE JANEIRO, during the latter half of the 17th century, contained only 2500 inhabitants, and about 600 military. * Now, however, this capital is in every respect totally changed, and it may be accounted one of the principal cities of the New World. Two thousand Europeans emigrated with the King from Portugal, and thus the manners and customs of Europe have been transplanted to Brazil. The first thing which excites the astonishment of a stranger on landing at Rio, is to find that the number of negroes and people of colour greatly exceeds that of the whites. The natives of every country are here united together in commercial pursuits, and their intermarriages produce various new races. The most distinguished and privileged portion of the inhabitants of all the Portuguese Brazilian states, are the natives of Portugal, called *Portuguezes*, or *Filhos do Reino*; the next are the *Brazileiros* (Brazilians, or Portuguese born in Brazil, of more or less purity of origin,) *Mulatos*, (Mulatos, born from the union of whites with negroes,) *Mamaluccos*, (Mamalukes, born whites and Indians, also called Mestics,) *Negros*, (the pure African Negroes, also called *Muleccos*,) *Creolos*, (Creoles, born of Negroes in Brazil,) *Caribocos*, (born of Negroes and Indians,) *Indios*, pure Indians, or aborigines of Brazil, of whom the most civilized are called *Kaboclos*, and those who still live in a state of primitive rudeness are distinguished by the names of *Gentios*, *Tapuyas*, or *Bugres*.

Rio de Janeiro contains abundant specimens of all these different races; the Tapuyas, however, are not so numerous as the rest. These various tribes of people are seen in the streets of the city, busily employed with the Europeans. Englishmen, Spaniards, and Italians, are very numerous here; the French also emigrate in great numbers to Rio de Janeiro, but Germans, Dutch, Swedes, Danes, and Russians, are very seldom seen. Negroes, almost in a state of nudity, are employed in carrying burthens, and this useful race of people transport all kinds of merchandize from the harbour to the city; ten or a dozen of them together are frequently seen carrying heavy loads upon thick poles, and marching to the measure of their own wild songs. Carts are never used for the conveyance of merchandize, though coaches drawn by mules

* Southey's History of Brazil, Vol. II. p. 667.

are frequently seen driving about the city. The streets for the most part cross each other at right angles, and the houses are in general only of one or two stories high. The town, however, contains many good buildings, particularly near the harbour, in the *Rua direita*, and in the vicinity of the royal palace, which, though not a remarkably fine edifice in itself, is finely situated, and commands a beautiful view of the sea. Among the finest buildings at Rio de Janeiro, may be reckoned the numerous churches, the interiors of which are for the most part splendidly ornamented. Ecclesiastical festivals and processions are very frequent here, and on such occasions fire-works are displayed before the church doors, accompanied by the reports of guns and sky-rockets.

Rio contains a tolerably good opera-house, where Italian operas and French ballets are performed. The aqueduct is an important public work, and there is a beautiful promenade leading to the eminence from which the aqueduct descends. On the side next the land the city is surrounded by marshes overgrown by mango trees, (*rhizophora*.) The proximity of these marshes, together with the unfavourable situation of the city itself, must be highly injurious to the health of the inhabitants.

A European, on first landing in these tropical regions, is astonished at the beauty of the natural scenery and the luxuriance of vegetation. The gardens are every where shaded by gigantic mango trees, (*mangifera indica*, Linn.) cocoa trees, banana trees, (*musa*,) green orange trees loaded with golden fruit, melon trees, (*karica*,) the rich scarlet-blossomed *erythrina*, &c. Groves of these trees form delightful promenades in the vicinity of the city, and present to the admiration of the stranger multitudes of curious birds and butterflies. In Brazil nature has hitherto done more than man. Since the court has resided here, the country has, however, undergone great improvements, particularly with respect to the increase of trade, over which, unfortunately, Great Britain possesses too powerful an influence: for even the Portuguese ships are subject to heavier imposts than the British. The capital has derived vast benefit from the increased circulation of money, to which, of course, the presence of the court in no small degree contributes. The foreigners attached to the different European embassies, have also introduced a degree of refinement among the inhabitants. There are also in Brazil European artists and mechanics of every class, and in a few years nothing will be wanting that can contribute to the comforts of life.

The abundance of fruits and vegetation of every kind which this fertile climate produces is almost inconceivable. Oranges, mangos, figs, grapes, guayavas, (*psidium pyrifera*, Linn.) pine apples, (*bromelia ananas*, Linn.) grow in singular perfection. There are several varieties of bananas, particularly those of *St. Tomé*,

and the *banana da terra*, which is accounted the most wholesome, cocoa nuts, with their refreshing milk; jacas, (*artocarpus integrifolia*, Linn.) which have a disagreeable sweet taste; *melancias*, (water-melons,) the nuts of the sapucaya tree, (*lecythis ollaria*, Linn.); those of the *arancaria*, (Brazilian pine,) and other fruits, are exhibited for sale in all parts of the streets. The sugar cane originally grew wild in the vicinity of Rio. The markets are invariably stocked with fish, poultry, and various kinds of game, sold by the huntsmen. I observed a singular species of hen, with yellow feet and beaks, originally brought from Africa. There is a numerous military establishment at Rio. The difference between the troops brought from Portugal, who fought under Wellington in Spain, and those raised in Brazil, is very remarkable. The former present a military appearance, but the latter, on the contrary, are enfeebled by the heat of the climate, and their arms are carried home by negroes from the place of exercise.

I arrived in the tropical climate of Rio during the winter season; the heat was, however, as overpowering as in the warmest months of our summer. I had expected rain in this American winter, but, to my great joy, not a drop fell, a circumstance which serves in some measure to disprove the common assertion that the cold season in this climate is invariably accompanied by rain. My letters of introduction procured me the kindest reception in many families at Rio. I cannot forbear mentioning, with the strongest gratitude, the favours I received from the Swedish Consul-General Westin, the Russian Consul Von Langsdorff, the English Chargé d'Affaires Chamberlain, and the Russian Chargé d'Affaires Swertzkoff. My countryman Engineer Major Feldner, overwhelmed me with proofs of his friendship; he formed several agreeable travelling parties, which enabled me to observe the country in the vicinity of Rio. On one of these interesting journeys I made my first acquaintance with the aborigines of Brazil. The little village of St. Lourenzo, in the neighbourhood of Rio de Janeiro, is the only spot which contains any remnants of the original native tribes of this country. In order to observe them the more accurately, our party set out from Rio, accompanied by Captain Perreira, a gentleman well acquainted with the country. The weather proved unusually fine, and I was every moment delighted with the novelty of the surrounding scenery. We landed not far from San Lourenzo, and ascended the rising grounds, by a path which led through thickets of the finest shrubs. Lantanas, with their flame-coloured, deep red, or rose coloured flower-tops, are here interspersed with the heliconias, and other elegant plants, and form a thick copse. The huts of the Indians, on these heights, are scattered among groves of dark shady orange, banana, and other trees, loaded with their rich fruit. A painter would here have an excellent opportunity to perfect his pencil in the luxuriant vegetation

of the tropics, and picturesque scenes of an elevated nature. We found the inhabitants occupied in making pottery with a kind of dark green clay, which burns red. They make large vessels merely by the hand, without any potter's wheel, and glaze them with a small muscle, moistened by saliva; young and old sat together on the ground; the men work on board of ships in the king's service; the greater part of these men had still all the genuine Indian character, but the others appeared to be of mixed origin. The distinguishing traits of the Brazilian race, which I first observed here, and afterwards always found confirmed, are, a body well formed, of the middle size, or often less than the middle size, and, in the men, stout and muscular; a red, or yellowish brown colour; the hair very strong, hard, long, straight, and jet black; the countenance broad, and rather bony, having the eyes often placed obliquely, and yet frequently well formed, with strongly marked features, and generally a thick mouth; the hands and feet small and finely formed; the beard generally thin and hard.

The few Indians who live here are the sole remains of the ancient numerous population of this country; and yet this not properly their paternal home. Rio and the surrounding districts were originally inhabited by the warlike race of the *Tamoyos*. These people, who were partly dispersed by the *Tupin-Imbas*, (called by the Portuguese *Tupinambas*,) subsequently united with the latter against the Portuguese, and then both tribes joined the French: when, however, the French were driven from this country in the year 1567 by the Portuguese and the Indians, who had joined them, the Tomoyas were partly extirpated and partly driven back to the forests. It is said, though the assertion is scarcely credible, that the *Tupinambas* wandered in an oblique direction through the forests to the banks of the river Amazon, where they settled. It is, however, certain, that at present on an island of the great Amazon river, at the outlet of the Madeira, in the spots called *Tupinambara*, which at a later period became the settlement of the *Topayos*, some remnant of this race still exists. Thus the extensive scattering of these people may be accounted for.* Some interesting accounts of the manners and customs of the *Tupinambas*, are contained in the works of Lery and Hans Staden, which also afford a faithful picture of all those civilized tribes of Coast-Indians, now called by the Portuguese tame Indians, or *Indios man-*

* According to the description of Father D'Acunha, in de la Condamine, pag. 137, the *Tupinambas*, and other kindred tribes of coast Indians, were widely scattered. This is evident from the names derived from their language, which are common along the whole eastern coast, to the river Amazon, and even in Paraguay, where Azara distinguishes them by the name *Guaranis*. Vol. II, p. 52. The words which this author quotes from the *Guarani*-language, differ, it is true, in many instances, from those of the *Lingoa geral*; but at the same time there are frequent analogies between them, so that both nations seem to be closely allied to each other.

vos. Southey and Beauchamp, in their Histories of Brazil, have gleaned from the works of the above authors. Vasconcellos, in his *Noticias curiosas do Brazil*, divides all the aborigines of the east coast in two classes, namely, the civilized Indians, *Indios mansos*, and the wild hordes, *Tapuyas*. When the Europeans first visited this country, the former inhabited merely the sea coast. They were divided into several tribes which differed very little from each other, in language and manners. The custom of fattening their prisoners, in order to kill them on a festival, with the club *Tacapé*, or *Ivera pemme*, adorned with variegated feathers, and then devouring them, prevailed universally. Among these tribes were the *Tamoyos*, *Tupinambas*, *Tupinaquins*, *Tobayaras*, *Tupis*, *Tupigoaes*, *Tumiminos*, *Amoigpyras*, *Araboyaras*, *Rariguaras*, *Potigoares*, *Cavigos*, &c. Father José de Anchieta has left us a very complete grammar of the language, common to the whole of the tribes on the coast, and therefore called *Lingoa geral*, or *Matriz*. Though these Indians are now all civilized, and have adopted the Portuguese, they still recollect more or less of their mother tongue, and the old men and women speak it pretty accurately. All the names of animals, plants, rivers, &c. which occur in descriptions of Brazil belong to this language, which extended over all the adjoining countries, as the names of the animals in Azara's Natural History of Paraguay, as well as other facts shew. These names, which are all taken from the *Guarani* language, correspond, in a great measure, with the *Lingoa geral*.

The Indians of the first class (according to the division of Vasconcellos,) have completely changed their mode of life, and thereby lost the originality of their character. It is quite otherwise with the second class or *Tabuyas*; they have undergone no change, and are still in their original savage state. Inhabiting the interior of the forests, and withdrawn from the observation and the influence of the European settlers, these savages live in greater security than their brethren on the coast, with whom, as well as the Europeans, they are in constant war. They are divided into various tribes, and it is remarkable that they all speak different languages. One very wild tribe, the *Uetacas* or *Goaytacases*, as the Portuguese call them, dwelt on the east coast, surrounded by races that spoke the *Lingoa geral*, from which their language was completely different. They lived in constant war with their neighbours, and were dreaded by them and the Europeans, until the Jesuits, so well practised in civilizing the savage hordes of this quarter of the world, at last succeeded, to a certain degree, in softening their manners.

At the building of *St. Sebastian* (*Rio de Janeiro*), in 1567, *Mendo de Saa* established the village of *St. Lourenzo*, under *Martin Alfonso*, for the Indians who had fought bravely against the

French and their allies, the *Tupinambas*, and contributed to their expulsion. The Jesuits afterwards brought the new converted *Goaytacasas* to this village, and the Indians who at present inhabit it are their descendants.

The walls and huts of San Lourenzo are formed of stakes and lattice work, with the interstices filled up with clay, and the roofs are covered with cocoa leaves. The furniture is very simple. Mats spread on boards supply the place of beds. Occasionally may still be seen the sleeping-nets, formed of cotton, which were formerly in general use among the Indians. Both these kinds of bed have been adopted by the lower orders of the Portuguese, throughout the whole of Brazil. Large pots, which keep water cool, are every where used; they are made of a kind of clay, through which the water, slowly filtering, evaporates externally, and is thus cooled internally. A cocoa-nut shell, cut through the middle, with a wooden handle, serves to lift the water. Some earthen pots for cooking, (*panellas*,) and gourds for dishes, with trifling articles of clothing and ornament, and sometimes a musket, or bow and arrows, complete the remaining domestic articles.

The mandioca (*jatropha manihot*, Linn.) and maize, (*milho*,) which form a considerable part of the sustenance of these people, and which grow in abundance here, have been described so fully by Koster and Mawe, that it is unnecessary for me to say more of them. There are, besides, planted around the houses, some spicery shrubs, (*pimenteiras*). Several kinds of *capsicum*, of which one with oblong red fruit is called *malagueta*, and another with roundish red or yellow fruit, *pimenta di cheiro*, and bushes of *ricinus*, with their angular leaves, which supply the families with oil expressed from their seeds, surround every dwelling. Our botanist, M. Sellow, found, growing wild, near the residence of the Indians, a kind of cress, (*lepidium*,) which is similar in taste to the European, and which the Indians assert to be a good remedy in complaints of the chest. While M. Sellow was making acquisitions in his department, I obtained some beautiful birds, which the Indians offered for sale, shut up in wooden cages. Among others, I purchased the violet and orange coloured tanager, which, in this quarter of Brazil, is called *gatturania*.

After an interesting visit to St. Lourenzo, we returned, and soon landed again near Mr. Chamberlain's country house, which is situated in a little creek, shaded by orange and cocoa trees, (*theobroma*,) and mango trees, (*mangifera indica*, Linn.) larger than our tallest oaks. We were astonished at the quantity of wild fruits and nuts which grew on the shore, among which the great cucumber-shaped fruit of the thorny bombax was particularly abundant. Mr. Sellow has discovered that the brilliant beetle (*curculio imperialis*) lives on the bombax tree. This is one of the most beautiful insects in Brazil, and, from the observa-

tions of this traveller, some minute information respecting the curious changes it undergoes may be expected. The steep precipices along the shore were overgrown with large *cactus* trees, and the *agave fetida*, while the clustering bushes at their feet produced a picturesque effect. On our way back to Rio, we saw the *Armacao das Baleiias*, or the magazine for the whale fishery. Whales are still extremely numerous on the coast of Brazil, though the fishery has been carried to a very great extent. Lery mentions that they were formerly found even in the river of Rio de Janeiro.

I should have been very well pleased to have made a longer stay at Rio, but that would have been contrary to the plan I had laid down, for the riches of nature are not to be found in cities, but in fields and forests. Through the liberal spirit of the government, aided by the friendly attentions of the Minister Conde da Barca, I was enabled speedily to make every necessary arrangement for my journey. I received a passport and letters of recommendation to the different Captains General. The civil and military authorities were directed to give us every assistance, to forward our collections to Rio, and, if we required it, to supply us with beasts of burthen, attendants, and escorts of soldiers. Two young Germans, MM. Sellow and Freyreiss, who were familiar with the language and manners of the country, joined me in the enterprise of exploring the eastern coast towards *Caravellas*. We procured sixteen mules, each of which carried two wooden chests, secured against rain and moisture by coverings of raw ox hides; and, having engaged ten men to take care of our cattle, and to assist in hunting, we proceeded on our journey, well armed, supplied with sufficient ammunition, and provided with every thing requisite for collecting objects of natural history.

CHAPTER III.

Journey from Rio de Janeiro through Praya Grande, S. Gonzalves, River Guajuitibo, Serra de Inua, Lake and Freguesia of Marica, Gurapina, Ponta Negra, Sagoarema, Lagoa de Araruama, S. Pedro dos Indios, to Cabo Frio.

AFTER we had made preparations for our departure from St. Christopher, a small village in the neighbourhood of Rio, our cattle were put on board a large barge; but it cost us much trouble before we could bring our mules to embark, for want of necessary conveniences. We left St. Christopher on the 4th of August, and sailed through the great bay of Rio to the village of Praya Grande, where we landed about midnight. All the inhabitants were wrap-

ped in sleep. The negroes were sleeping on the sand of the shore, beside a small fire which cast but little heat, and their naked bodies were only covered with a thin cotton cloth, which could ill protect them from the heavy dew. After knocking for a long time at a public-house, the landlord, with only his mantle wrapped round him, and scarcely awake, opened the door. Here we were compelled to remain the whole of the following day, as our *Tropa*, (thus they called a united number of beasts of burden) could not be disembarked, on account of the shallow water, till late at noon.

We left Praya Grande on the 6th, accompanied by some of our friends, in the hope of advancing a considerable way; but we soon found that it is far more tedious and troublesome to travel with laden mules than after the European fashion. Our trouble with the mules was so much the greater, as those generally unruly beasts, having all been bought in a hurry, and being unused to carry burthens, were continually attempting to free themselves from their loads, which some effecting, we were obliged to turn back and seek for them. After a few hours we reached a pretty level meadow, inclosed by bushes of beautiful feathered mimosa, where to accustom ourselves to sleep under the open sky, we halted, though there were houses in the neighbourhood. Our luggage was placed around in a semi-circle, to protect us from the damp night air, and ox hides spread for our beds; in the middle, we lighted up a large fire. Our protection from the heavy dew consisted in a thick woollen covering over us, and our portmantaus served for pillows. A frugal supper of rice and meat was prepared, which we shared under a beautiful tropical sky, covered with stars. With no little merriment, we partook of our repast, and the neighbouring planters, returning to their dwellings, as they passed us, made ludicrous comments on the strange gypsey-band*. To be secure from theft in these inhabited countries, we divided ourselves into watches for the night. My German bounds were of great service to me, in this respect, for, at the least noise, they ran, with loud barkings, to the spot from whence the noise proceeded.

The bright morning procured me for the first time a chasing excursion, which I had only known hitherto from Le Vaillant's description of a similar scene in Africa. Our covering and baggage had been wetted through by dew, but the sun soon dried them. After breakfast, every one took his gun, and being well provided with ammunition, we penetrated into the interior of the country. The bushes around us were enlivened with a multitude of beautiful birds, who charmed us with their notes. In a neighbouring marshy copse, I soon killed a pretty water-hen (*gallinula*) several kinds of Tangara (*tanagea*), of the most beautiful plum-

* It is said that there are gypsies in Brazil; Koster mentions them, page 399; but I have never seen any.

age, and a valuable small colibu. As the heat now began to be intense, I returned to our tent. Every huntsman then produced what he had caught. Mr. Freyreiss brought among other beautiful birds, the blue *nectarinea cyanea* (*certhia cyanea*, Linn.)

Our *tropa* was now laden. The road led through hills, in which we beheld the most beautiful vegetation; plantations of mandiacca, sugar-cane, orange trees, which here form small woods round the dwelling-houses, and small marshy spots presented themselves to the eye of the beholder. Banana trees in thick bushes, mammon trees, and high slender cocoa-palms adorned the solitary houses; beautiful variegated flowers bloomed under low bushes. We saw also a *erythrinu*, with its long tubular flowers of a scarlet red, a beautiful light yellow trumpet flower*, to which Mr. Sellow assigned the name of *couacea*, of a soft yellow colour, with large flowers. - In the middle of this copse rose the *cachus agave fetida* and other high trees. By the side of the road grew the Indian cane (*canna Indica*, Linn.), sometimes to the height of ten or twelve feet, with deep red flowers; but the sight of the *buginoilæa brasilienses*, a prickly bushy tree, of a beautiful light red colour, delights the stranger more than all these. It is nevertheless not the flowers, but the large *bactreæ* which cover them, that enhance the lustre of this beautiful sight.

The inhabitants of the country, in light jackets of thin summer cloth, with large round flat hats upon their heads, gazed at us as they rode by. The horses which are used in Brazil, are generally good and light, of a middling size, but rather small; they are of a Spanish breed, and have mostly fine even backs, and beautiful feet. The saddles are still the same as in old times, large and heavy, provided with pads, covered with velvet, and often neatly stitched; to this is affixed a pair of old fashioned stirrups of bronze or iron; many even use a complete box or wooden shoe, in which the foot rests. The Portuguese are much on horseback, and many very excellent riders are to be met with among them. They are very fond of an ambling pace, and they bind certain pieces of wood about the feet of their horses, to accustom them to this step. We rode through the little village of S. Gonzalves, which has a small church, and in the afternoon, we arrived at the little river of Guajintibo, where we fixed our camp by the side of a solitary *venda*†.

The Guajintibo is a small river which runs through a soft sandy hollow through thick bushes. As the meadows produced good food for our cattle, and the woods were full of birds, we fixed on this place. By daybreak the next morning, the huntsmen had divided themselves; I went to the bank of the river which was

* *Bignonia*.

† *Vendas* are houses on the roads, paths, and even in villages, where various necessities, particularly victuals, are sold.

shaded by lofty, old *mimosa*. This tree is frequently met with in the Brazilian as well as in other tropical woods. I soon discovered the most beautiful birds; the deep red beautiful Tije (*tanagra Brasilia*, Linn.), the brownish red cuckoo (*cuculus cayanus*, Linn.) with its long tail, and other beautiful species, were seen in the dark shadow of the cool river. I soon killed a number of birds, and thus became acquainted with the difficulties of the chase in this country, for all the bushes, particularly the *mimosa*, are full of small thorns, and the creeping plants (*cipos*) are so thickly interwoven with each other, and around the stems, that without a broad wood knife (*facão*), it is not possible to penetrate these wilds. Strong boots or hunting shoes are equally necessary. The small muskitoes in the shadow on the bank of the stream are very troublesome. They call these insects *marui* or *murui* (*maruim*); though very small, by their sting they give rise to terrible itching. Englishmen have assured me that they are the same insects as the sand flies in the West Indian islands*.

We were, however, richly indemnified for our trouble, by the novelty of the surrounding scenery, and particularly by the variegated and beautiful plumage of the birds. Here, too, we met with magnificent flowers and plants; among others, in the shade, a deep-red blooming *salvia*, which Mr. Sellow called *splendeus*, and a beautiful *justicia*, with rose-coloured flowers. As it is ever found to be very wet in the shaded bushes, from the nightly dew, notwithstanding the great heat, I betook myself to a dry open meadow, which was covered with low copsewood, particularly with *santana* and the *asclepias anassavica*, with its orange coloured flowers. Here swarmed a number of colibus, which, buzzing like bees, flew around the flowers. On my return, I killed several of the *trochilus saphirinus*, Linn. which have blue throats, and coral-coloured beaks, and are very common here. I also observed the small pretty *kragencolibu*, (*trochilus orinatus*,) with a rust-coloured tuft.

In this, our first chase, we saw no quadrupeds, except a small *tapiti* (*lepus Brasiliensis*, Linn.) This small hare is common through all America; it is like our wild rabbit, and eats well. We now left the Quajintibo, and reached a thick wood of *rhexia*-bushes, 10 or 12 feet high, intermixed with high trees and grass-plots; these low grounds are shut in on all sides by high mountains, covered with wood. The *crotophaga ani*, Linn. flew and hopped among the black cattle which were feeding on the meadows, as did also the bentavi (*lanius pitangua*, Linn.) which is always calling out its name, bentavi! or tictivi! In the neighbourhood of a *farenda*, (a seat with a farm and plantations,) Mr. Sellow found a new kind of *canna*, with yellow flowers. A little farther, we reached a spot, environed by lofty wild mountains, and

* S. Oldendap. Caract. I. p. 123.

covered with brush-wood, where, in the cool shade, were seen clear ponds of water; a number of birds enlivened this place. The rust-coloured singing wagtail, with pointed tail-feathers, (*Virondé*, Azara Voyages, tom. III. p. 461,) was building its nest in the reeds, and often flew past us with the materials. Behind this place, we were delighted with a wood or forest; high, thin, white stemmed mimosa, cecropia, cocoa, and other trees, were so thickly interwoven with creeping plants, that the whole appeared to be an impenetrable maze. In the tops of the trees, beamed like fire, the flowers of the creeping *bignonia bellas*, (so called by Mr. Selow, after the Marchioness of Bellas, who first discovered this plant,) and the ornamental flowers; below were various kinds of colibus and butterflies. At length we came to parts where the wood had been cleared away for cultivation. The immense burnt stems stood like ruins of colonnades, yet in some parts connected by withered ropes of creeping plants. When we arrived here, we heard a loud creaking, occasioned by the noise of the carts which are used in the Farendas. A heavy, massy, wooden disc, with two small round apertures, forms the wheel, which turns grating round the axle-tree, and produces a loud disgusting noise through the whole country. The oxen which draw these carts are of a colossal size, and of a most beautiful breed; their horns are very long and strong; these are driven by a negro slave, with a long stick in his hand.

We now approached a chain of mountains, which bears the name of *Serra de Inuá*. This wilderness exceeded every thing which my imagination had hitherto formed of grand scenery. We entered a low country, in which much clear water ran through the rocky ground, or formed stagnant ponds in it; a little farther appeared an immense wood. Palms, and various kinds of trees were so interwoven with creeping plants, that the eye could not penetrate through this thick green wall. Everywhere, even upon small low trees grew a number of fungous plants, *epidendrum*, *cactus*, *bromelia*, &c. which mostly bear such flowers, that whoever sees them for the first time, must feel himself delighted. I mention only one species of *bromelia*, with a coral-red flower stalk, whose leaves have beautiful violet-blue points, and the *heliconia*, a species of the banana, similar to the *speltizia*, with deep-flower cups, and white flowers. In these dark shades, near the cool rock-springs, a sudden coldness and shivering surprise the heated traveller. The rocks are covered with a thousand kinds of fungous and cryptogamous plants; particularly the most beautiful ferns (*filix*) hanging in a picturesque manner, like feathered ribands, from the trees. A deep red horizontal mushroom adorns the dry stems; the backs of the sounder trees are covered with beautiful round spots, of a carmine colour; and from the colossal height of the trees in the Brazilian woods, we often missed the finest birds,

which were perched on their tops. We were obliged to throw away a number of fine blossoms from sappy plants, because they so quickly rotted, and could not be kept in the herbarium. The largeness and fulness of South American vegetation is produced by the great moisture which pervades these forests; in this respect, America possesses considerable advantage over all other hot countries.

Arrived on the height of *Serra de Inuá*, we saw parrots with red foreheads (*psittacus coronatus* of the Berlin museum, or the Perroquet Dufesne of Le Vaillant), flying in pairs over the trees; they are here called *camutanga*, and in other parts *schaua*. We have since often used them at our meals. Continuing our road, we descended into a plain, and spent the night in the *Fazenda de Inuá*. Here we saw remarkably large oxen and fat pigs of a short black breed, with a bent back, long snout, and hanging ears, hens, turkies, guinea-fowls, partly with white feathers, geese of the European species, and the *anas moschata*, Linn. which are accustomed to fly away and return.

The *Serra de Inuá* is a point of the higher chain of mountains which runs parallel with the coast, projecting into the sea. It is covered with ancient forests, in which many useful trees grow, and is particularly productive of game. We stayed here a day, purposely to hunt, and got a number of fine birds. Here Mr. Freyreiss shot at the *simia rosalia*, Linn. known by the name of *maritana*, and called here red salui, but missed it; it lives in the thickest forests, and is only met with towards the south, in the vicinity of Rio Janeiro and Cabo Frio. Parrots are very numerous in these mountainous woods, particularly a species called here Maracaná, to which, among others, belong the *psittacus macaoanna* and *guianensis*. Leaving Inuá, we found in the shade of an ancient wild forest, many objects totally unknown to us. On the ground appeared the hairy bush-spider, *aranha caranguefeira*, (*arania avicularia*, Linn.) the bite of which is said to produce a painful swelling; it makes holes and lives in the earth. We also met with a variety of large broad toads, though not so numerous as in the *Serra*, which we had just left; for there, when the evening came on, the ground was entirely spread with them. Among them I noticed a species which has not, I think, been hitherto described, (the *bufo limaculatus*), remarkable for two large dark squares on its back. Immense long tabs of *tillandria* descend from the white mimosa trees in the forest. We saw also a bird (*procuas medialis*) of a milk white colour, sitting in the brightest sun-shine upon a dry branch at the top of a tree. His cry is like the sound of a hammer striking an anvil, or a bright sounding burst bell; he is of the genus which Illigen has named *procuas*; on the whole eastern coast he is called *araporga*. In colour he most resembles Linné's *ampelis carunculata*, though a different bird, being suffi-

ciently distinguished by his naked green throat, and his want of the comb on the forehead.

Among the swarms of parrots which filled the forest through which we passed, we could frequently distinguish the pretty perikit, with a pointed tail, and which is called here *tiriba*. I killed a squirrel (*sciurus æstuans*, Linn.), the only one of the species which I met with; it is distinguished by a brownish grey hair, mixed with others of a yellowish hue occasionally. We observed some caravans with beasts of burthen.

After having passed through a range of plantations, burnt woods, marshes and meadows, surrounded by picturesque mountains, covered with forests, we came to some spacious meadows interspersed with marshy spots, covered with reeds. Here the snow-white heron, the American lapwing, (*vanellus cayennensis*), the jassanas (*parra jacana*, Linn), called here *piasocca*, and the plover, were to be seen in every direction. Black cattle were grazing in the pastures, and the brilliant violet-coloured perol (*oriolus violaceus*), frequently walking in the midst of them. The *crotophaga ani*, Linn. we found parched or sitting in large troops, on the hedges and fields, and so little apprehensive of danger, that one might ride closely up to them.

In the evening we arrived in the parish (*Treguesia*) Marcia, situated on the lake of the same name. We saw the inhabitants of a solitary house, near which we stopped, carefully closing their doors against us. A mob soon collected around us, staring and laughing, when they saw us skin the beasts and birds which we had killed that day. Our double-barrelled guns occasioned much surprise, from their not having seen any before. The lake of Marcia, on the banks of which we halted for a day, to examine its sandy vicinity, is said to be about 6 leagues (12 geo. miles) in circumference. Its banks are low and marshy, and it abounds with fish. I saw some of the inhabitants catch a species of shoal-fish (*silurus*), which is also very common in the waters on the eastern coast of this country.

We found here a species of cob, with a grey head, red beak and feet, very much resembling our *larus ridibundus*, a beautiful species of martin (*sterna*), lapwings, a species of plover (*charadrius*), &c. and over the bushes and marshes, we could ascertain the *urubus* flying through the air. I had the good fortune to kill an *acabiray* (*vultur aura*, Linn), hitherto only properly discriminated by Azara. At first sight, it might be confounded with the grey-headed urubu (*iribu azara*), but on a closer inspection, he may be distinguished, even when flying high in the air. These vultures are of great use to consume and destroy such putrid remains as would fill the atmosphere with pestilential or noxious vapours. Their scent is so acute, that they come from very considerable

distances, in quest of any animal that has died, and in a place where they had not been seen before. On this account, they are never molested, and they are found alike numerous in the open country and in the forests. The country near the lake appears to be rather sterile, on account of the sand and marshes. All such tracts as are dry, either contain pastures with short grass, upon which cattle is feeding, or consists of mountains diversified with forests and rocks. The people rear many horses, which are but indifferent, and mostly small. There were also goats covered with short shining reddish hair, and with black spots. Not far from the lake, is the little villa de Sta. Maria de Marica, the chief place of the *Freguesia*, consisting of houses not exceeding one story, and a church, with regular but unpaved streets. The houses have no glass windows, but merely apertures, which, as in all the Brazils, are shut up with a wooden railing. The villagers grow in the vicinity, the mandioca, beans, maize, with a little coffee, and several plantations of the sugar-cane. This last, as they say, grows high in fruitful spots, but in the sandy districts, does not reach above the height of six spans.

In our progress, we recognised among the copse, the trumpet-flowers (*bignonia*) with most beautiful blossoms, also some strangely formed fruits. The botanist will find here that the number of *plantæ leguminosæ* is by far most abundant in the Brazils. Notwithstanding the numerous *fazendas* about here, the country bears yet a wild aspect: it appears to form a broad valley, encompassed with high mountains, and with a hilly ground, from which trees of the most beautiful description, intersected by copse wood, are rising. Near the tops of those trees we perceive on the branches, large dark lumps, the nests of a very small species of the termita, called *cupi* or *cupim*. Ants and other similar insects prove very destructive to the cultivated grounds in the Brazils. They are found in such numbers, and of so many different species, that an entomologist might fill a large volume with a description of those insects alone. One of the larger species is nearly an inch long, and has a disproportionate large body. In some districts, as in *Minas Geraes*, they are broiled and eat, being there named *janachura*. Another very small and red species is very troublesome and noxious, not only eating many of our insects, particularly butterflies, but penetrating in large numbers into the houses, where they quickly eat up every thing which is edible, and especially sweet things. To guard against them, the only expedient is to put the feet of the tables into large platters filled with water, or to cover them with tar; but they are sometimes known to overcome even such impediments. Some species construct upon the walls of the rooms, from a sort of clay, covered ways, with many ramifications and

avenues, in which they walk up and down. In the forest-roads, troops of ants may be seen, all carrying bits of green leaves, or some articles of provender, to their nest.

After this we entered into a wild forest, where we saw for the first time the tucan (*ramphastos dicolorus*, Linn.) with its immense beak, and a dark orange coloured breast, finely contrasted with a black plumage. These sagacious birds kept so high in the tops of the trees, that our hunters could not reach them. We advanced alternately over a black moorish, or a red loamy ground. The forest improved in magnificence as we proceeded to penetrate it, being composed of the finest trees, with an infinite variety of leaves. The European can form no conception of their grandeur, nor is it possible to give an adequate description of them. Here we frequently met with the cocoa palm-tree, which grows to the height of 30 feet, and is called in the *Lingoa geral*, *airi assú*, and in *Minas*, *brejeuba*. The natives make their bows from them; their stem is of a dark brown, and closely covered over with long pointed thorns, in horizontal rings. Their leaves are long, and, as in all the cocoa species, beautifully feathered. From the place where they spring, the yellowish blossoms hang down, which afterwards are formed into hard, oblong pointed nuts, of the size of a pigeon's egg. A similar holly-tree of a small size, called *airi mirim*, is found in all these forests. Neither of them has been hitherto classified. The *cactus*, and *agave*, and *epiden-drum*, cover all the trees with the finest coloured blossoms. Wherever there is an aperture in the wood, there spring up also tufts of *arum*, *caladium*, *dracontium*, and similar plants, which, in their variety and mixture, produce the most superb effects. There was here also a profusion of the *dracontium pertusum*, with its leaves strangely perforated with holes; the notice of our botanist was also attracted by a blue-blossomed *maranta*.

Our young Indian Francisco was, in this day's journey, not a little entertained by the mistake of one of our hunters, who shot at an excrescence of a branch, which he took for a bird. He was a good faithful fellow, but rather obstinate and whimsical. Of some of his Indian peculiarities, he could never be cured; he would never go to the chase, without his breakfast, like the other hunters, whatever delay it might occasion.

We had intended to reach Ponta Negra that day, but had been led astray in the thick wood. We came, however, to a large *fazenda*, the proprietor of which, *Mr. Alferes da Cunha Vieira* gave us an hospitable reception. This seat is called Gurapina, and contains a large sugar-enghendo or manufactory. The cane is pushed between three cylinders placed horizontally, covered with pins of a hard wood, which press it. It turns out on the other side, completely dry and flat, the juice having been squeezed into a wooden trough standing underneath. These cylinders are put

in motion, by means of a long pole, by oxen, mules, or horses. When the sugar is properly refined, it is poured into pointed pots, with an opening below, to give vent to all superfluous moisture; the surface of the sugar in the pots is then covered with a greyish clay (*barro*) which is to tinge it with a certain degree of whiteness. The proprietor told us, that with twenty slaves, he could raise about six hundred arrobas, (at thirty two pounds each), or nineteen thousand two hundred pounds, but with more labourers, from ninety to one hundred thousand pounds. The cayenne cane formerly was cultivated here. This, however, has now been almost entirely supplanted by the more productive cane of Otaheite. Our kind host conducted us with our people and luggage, into a large hall, where we lighted several fires, to prepare our food. Here we were frequently visited by all the other people of the estate, who testified uncommon surprise at the object of our investigations in natural history. A long rain detained us here for some time, and when it ceased, we found a plenty of game in the forest-mountains, which surrounded this plantation. Here we engaged a young Portuguese of the name of Francesco into our service, who became very useful to us as a hunter, being perfectly well acquainted with the country and its productions. Among other valuable articles, he procured us the marithina (*simia rosalia*, Linn.), which we had not had before. The araponga (*proenias nudicollis*), mentioned before, was here in great abundance. Francesco shot one for us. Good Brazilian hunters are very dexterous in searching the large woods, in which their bodies inured to the seasons, and their practice of walking bare-footed, are of great service to them. They dress commonly in a light cotton shirt and trowsers; a cloth jacket, which mostly hangs over their shoulders, they only put on in the rain, and during the cool of the night. Their head is covered with a felt or straw hat. The powder-horn and shot-bag are fastened to a strap, which hangs over their shoulders, and the lock of their long gun is usually covered with a piece of skin to prevent it from getting wet.

The temperature at *Gurapina* was very changeable; some days the thermometer fell as low as 13° Reamur; between this, we had also sometimes tolerably fine and warm weather. I frequently wandered in this sublime wilderness, the solemn silence of which is only occasionally interrupted by the cries of numerous parrots. Provided with fresh provisions in abundance, we lived here very cheerfully. Those which a traveller in this country can carry with him consist in *mandioca* flower, (usually denominated by the simple name of *farinha*), black beans (*feijão*, maize, *milho*), dried salt meat (*carne seca* or *do sertam*), and rice (*arroz*). Here we found good fresh meat; and besides this, our kind host supplied us, gratuitously, with a great quantity of excellent oranges, brandy, distilled from the juice of the cane (*agoa ardenti de canna*), rice,

maize, cotton, sugar, and farinha. The determination of this gentleman to receive no payment for all these articles, obliged us to leave the place sooner than otherwise we should have done. We therefore took our leave, and prepared to set out for *Ponta Negra*.

The roads were frequently so marshy, that our beasts with their heavy burthens, were in danger of sinking into them. We rode through thick bushes of a high reedy grass, canna alhexia, and low palm trees. On some hills we saw negroes, who were cutting down the low brushwood with a sort of sickles (*fouce*), fixed to a long pole, thereby preparing the ground for cultivation. Riding by some *fazendas* we saw thick hedges of orange trees, and with a considerable load of birds, and of ripe seeds; we at last reached the *Lagoa da Ponta Negra*. This beautiful lake, on its marshy borders, is covered with reeds; large flocks appeared of jassanas (*parajacana*, Linn.), and white herons, one of which we killed; their white plumage retains its purity even in marshes, by the aid of their long legs. At a little distance we arrived at a *venda*, where travellers refresh themselves with cinonade, or rather cold punch. Here we found too that the account of our arrival had preceded us, that the landlords had already projected their speculations on our purses. Near this house our eyes were feasted with a most extensive prospect over the sea, the lake, and the country around Rio de Janeiro, now behind us. Further on we found in the thick bushes that crossed our road, the great annu (*crotophaga major*, Linn.) in great plenty. His plumage is black, with a copper-green and steel blue tinge. We came next to the sand downs, when we beheld the white surges breaking with violence against the forest-mountains. Close behind the coast (*praya*) rises a cover of the greatest variety of trees, which are kept down by the sea-winds and storms, and rise only gradually.

In this cover along the coast, between twenty and thirty feet high, (so our journey lay) grew a kind of high thistles (*cactus*), and the bromelia, frequently ornamented with the finest flowers, is very plentiful. Small lizards rustled in the dry leaves on the ground, whilst the large année and the tijé, (*tanagra Brasilia*, Linn.) with his blood-red plumage, animate the bushes. This fine bird is very common, particularly on the sea shore and the banks of rivers.

Towards evening we were between the sea coast and a large reedy marsh, where large flocks of birds retired to rest; the tijé was very numerous, and the red-bellied thrush, (*turdus rufiventris* of the Berlin museum,) called here *sabiah*, poured forth their sweet evening notes. In the evening the *caprimulgus*, like a large sphinx of a slate colour, (*papilus idomeneus*,) fluttered about our horses, and, with a suitable net, we might have caught a great number. I found a dead bat, suspended to the branch of a tree, in which position it had probably died. It belonged to the

genus of *phyllostoma*, and was very similar to Agara's *chauvesouris première ou obscure et rayée*, but I could never see another of the species during my journey. As we were going to examine the blossoms of a low palm tree, we discovered, fixed to a little twig, the little nest of the blue-headed humming-bird, a species resembling the *trochilus bicolor*, (saphir émeraude, Buff.) neatly covered with moss. At night-fall, after having passed between some lakes, where we saw many shining insects, and heard the croaking of frogs, we arrived, after a long day's journey, at a *veda*, on the lake of *Sagoarema*. Here we found our people with the luggage, who had preceded us, on another road. Finding no provisions here, we were obliged to send out some of our people, who, after a long search during the whole night, returned with some bags (*boroacas*) of fresh fish, the only article of provisions they could come at; and so our intended supper became our breakfast.

The lake of *Sagoarema*, which forms a junction with the sea, is about six *legoas* long, and three quarters broad. The salt water, though emitting, in some places, a very disagreeable smell, contains great plenty and diversity of fish. Here is a dispersed *povoacao* of fishermen, who live in small loam huts on the banks. Every house has a hole dug in or near it, which serves for the purposes of a cistern, the sea water being often putrid. The fishermen here, like all the Brasilians, are lightly clothed; they wear large straw hats, large thin breeches, and shirts, and have their necks uncovered and their feet bare; every one has a stiletto in his girdle, mounted with brass or silver. This last custom is prevalent among the Portuguese, but is a dangerous weapon, for it is easily made instrumental to acts of bloodshed and murder among men of a rough stern character, like the fishermen of *Sagoarema*. The *venda*, which is on the sea-coast, belongs to these people, who share its produce; for this reason it is that travellers must pay more here than at other places. About an hour's journey from this place lies the parish (*freguesia*) of *Sagoarema*, a large village, or rather a small *villa*, with a church. As we were obliged to convey our *tropa* over the *lagoa*, which from this place empties itself into the sea, through a narrow channel, we took up our quarters in an empty house, and employed our time in taking a view of the surrounding country.

A hill, on which are the church, the church-yard, and a telegraph, rises near the *freguesia*, from the sea-shore. This hill we ascended as the sun was setting, and were highly entertained with the prospect. Before us was the immense ocean, which, roaring and foaming, rolled and broke against the hill; to the right rose, at a distance, the mountains of *Rio*; nearer to us we contemplated the variously broken coast, and, still nearer, the *Ponta Negra*; behind us were woody mountains, with a low plain covered with wood in front of them, and here and there the large resplendent

mirrors of the lakes; at our feet lay the *freguesia* of Sagoarema, and on our left the coast. We then returned to Sagoarema, which is mostly inhabited by fishermen, who also occupy and work at their plantations. Cochineal was formerly raised here, but its cultivation is now in disuse. The king paid for the pound $\frac{1}{2}$ doble, (6400 reis, or about 30 shillings); but the planters themselves were the means of destroying this profitable trade; they mixed this dear produce with farinha, and adulterated it so much that it lost its value. On the following day, Sunday, my companions attended a mass in the church of *Sagoarema*, during which time I ordered our *tropa* to be conveyed over the lake. The baggage was taken over in canoes, and our beasts waded unladen through the shallow water. Quitting this country, we proceeded through woods, which we found filled with numberless beautiful flowers. The glittering mirrors of the many lakes which extend from *Marrica* to *Cabo Free*, are, in reality, a considerable ornament to this country. Immense flocks of water-birds frequent the shores, particularly sea-swallows, sea-gulls, and herons, of which we soon killed a number. Most of the marsh and water birds are analogous to those in Europe; for example, we saw a species similar to the *larus ridibundus*, the *larus marinus*, *sterna caspia*, *hirundo*, and a third, very similar to the *minuta*. The difference between these birds in America and those in Europe is very trifling. The smallest sea-swallow* was very frequent on the plains near the coast; here these pretty-small sea-gulls were flying about, their dazzling white being augmented from its contrast with the black clouds of a dark stormy sky. Behind the sand-plains of the coast are marshes, and between both a tract of sandy ground, with a thick wood of dwarf cocoa-palms, about three feet high. This plant has no stalk, but feathered leaves; the ears curling, or bent outwards, stand like a *typha* upon an upright shaft, and are covered with small nuts, of the size of the hazle-nut. These sit like the grains on maize, and have, at the root, a reddish yellow, but sweet and edible flesh. These plants are there called *cocos de guriri* or *de passandi*. We fixed the *fazenda* of *Pitanga* for our night quarters, which we now saw before us, upon a height, like an old castle magically illuminated by the moon-light. We rode up, and knocked at the closed gates, which at length opened, and we were admitted. The complaisant *feitor* (steward) introduced us immediately into the building in which the farinha is prepared. As these were convenient quarters for our excursions, we remained

* I call this bird *sterna argentea*; it may be confounded with our *sterna minuta*, but nevertheless it is different; its size exceeds that of our European birds, for I found it nine inches one tenth. The beak and feet are yellow; the first has a black point; the forehead and all the lower parts of the bird are white; the crown of the head and the neck are black; back, wings, and tail, are of a beautiful silver grey.

here some days, in order to range pretty freely through the surrounding country.

This farinha manufactory was one of the most complete we had witnessed. The preparation of the meal is as follows: The roots of the *mandioca* plant, (*jatropha manihot*, Linn.) are first scraped to free them from the rind; afterwards they are held on a large wheel, which is turned round, by which it is rubbed into a thin pap. Then the mass is enclosed in long wide bags, made of bark or reeds, which are hung up and stretched at length. By this extension the bag becomes narrower, and presses out the sap from the mass.* The remaining consistent part is put into large pans of copper, or burnt clay, fixed in the wall, in which it is completely dried by the heat, but that the thick mass may not burn, it is continually stirred by a pole, with a small perpendicular board at its fore-end. The meal thus prepared is what goes under the name of farinha. When the weather became damp, we dried our newly prepared natural curiosities on the pans of the mandioca ovens; but, although they were always watched at night, we, nevertheless, could not prevent some scarce animals from being burnt.

The weather was now very cold, a strong wind blew on the seacoast, and the thermometer, at noon, was scarce at 13° of Reaumur. The country, in which marshes, meadows, copses and woods are intermixed, abounds with interesting animals. Our hunters brought, for the first time, the jocupemba, (*penelope marail*, Linn.) which is very good to eat, and the green tucane or arassarís (*ramphosus aracari*, Linn.) beautiful birds which have short notes of two syllables. The prospect from the buildings was truly agreeable, and of a considerable extent. A telegraph here corresponded with that at *Sagoarêma*, which we could distinguish at a distance. *Pitanga* had formerly been a convent, and there still remains the old church. About noon our *tropa* was laden, and after passing through narrow roads, where, in some places, we were obliged to cut down the chumps of trees, which obstructed our progress, we at length reached open meadows, with large marshes, woods, and broad pools of water. Through these we were obliged to wade, a disagreeable circumstance to those who travelled on foot, particularly the Europeans, who were not accustomed to such water-journies on foot. Detained by these adverse occurrences, it was late at night when we reached the *Fazenda Tirivirca*, whither we had sent a horseman before to procure quarters. Its owner, the Captain now assigned, as at first, his sugar-engents as a sleeping-place, but when we shewed him our portaria (pass from the minister,) he became complaisant, and invited us into his dwelling; this invitation we declined, being desirous to remain with our people. *Tirinica* is a considerable sugar-manufactory;

* *S. Gili Saggio di Storia Americana*, T. II. p. 304, 899, tab. 5.

the sugar works lie at the foot of a green hill, upon the top of which is built the house of the possessor, surrounded by about 20 small huts of his people and negro slaves. The great sugar plantations surround the *Fazenda*; on one side of it are thick high woods, and before the sugar-works is a meadow full of marshes and ponds, enlivened by marsh and water birds, which we could readily have shot from the window. After breakfasting next morning with our polite host, we distributed ourselves in the woods. Mr. Sellars and I went through the sugar-plantations, and some other small *Fazendas*, which are surrounded by pretty orange groves, and then plunged into one of the darkest woods, with which I was ever entertained during our stay in Brazil. High, dead stumps of trees on the border of it still shewed, by their marks of burning, the mode in which the soil had been rendered arable. The wood itself was an opaque wilderness of colossal trees; here grew the *mimosa*, *jacaranda*, *bombax*, *big-noni*, and other trees, also the *pao brazil* (*cæsalpinus brasiliensis*.) Upon them again was a heap of *cactus*, *bromelia*, *epidendrum*, *passiflora*, *bauhinia*, *barnsteria*, and other kinds whose tendril-stems grew below on the ground, but whose leaves and flowers were at the tops even of the highest trees. They cannot be examined, without hewing down these gigantic trees, in doing which the iron of the best axe is liable to break, such is the hardness of the wood. Creeping plants wind round the trees, in a truly curious manner. Among them a *baulinia* is very remarkable; its firm woody tendrils are continually growing into arches, which succeed each other; the concavity of every arch is as artificially followed, as if the chissel of a statuary had been used, and upon the opposite convex side is a short obtuse thorn. This wonderful plant, which might be easily mistaken for a work of art, rises to the tops of the highest trees. Its leaf is small and split, (*bilobum*,) but I have never seen the flower, although the plant is common. Other kinds of creeping plants distinguish themselves by a smell or scent, particularly strong, partly agreeable, and partly otherwise. The *cipo cravo* smells fragrant, something like the clove; another, on the contrary, which LA CONDAMINE* mentions as growing luxuriantly on the banks of the Amazon, smells like garlick. Many of these singular plants have long branches hanging down, which again taking root, block up the passenger's way. We were obliged to cut them down with a *facas*, to be able to proceed. Hanging branches of this description, which, when the wind agitates them, will often strike the traveller on the head, are common on all the forest-roads of Brazil. The vegetation in this part of the South American hemisphere is so luxuriant, that every lofty old tree becomes the emblem of a little world, a botanical garden of plants, truly rare, and certainly of an unknown kind. The yellow-bel-

* S. De la Condamine Voyage, etc. p. 74.

lied surucuá (*tragon viridis*, Linn.) was very common; its voice was heard everywhere, it is a note which is often repeated, and sinks from high to low. We soon learned to imitate it, and could thus easily entice them to perch at hand, on a low bough, where they were easily shot. Other birds (*dindrocolaptes*, ILLIGERI,) are equally plentiful, and are found in company with the beautiful woodpecker, with a pale yellow tuft (*picus flavescens*), with the red-headed woodpecker (*charpentier à huppe et cou rouge*, AZARA) and the *picus lineatus* pecking against the great stems. We killed many of the small parrots that had a pointed tail, and called here *tiribas*.^{*} Towards evening, I succeeded in obtaining the *pavo* (*pie à gorge ensanglantée* of AZARA.) It is a beautiful black bird, of the size of a crow, the front of its neck being the loveliest red. Mr. Sellow did not discover many new plants to-day, but found frequently the beautiful *alstrameria lighu*, Linn. with an agreeable red and white striped flower. He also caught a serpent, which is very common here, and which appears to form the ornament of its species; this beautiful reptile is known here by the name of *cobia coral*, or *coraes*; it must not be confounded with that *coraes* which is described in the works of LACEPEDE, DAUDIN, and others. The one found here is well entitled to the name of the coral-snake; the clearest and most shining scarlet-red is intermixed with black and greenish white-rings on its smooth and beautiful body, so that this harmless reptile, may be justly compared with a string of coral. I have several times put it in spirits, but never could succeed in preserving its red colour. In the Linnean system this species is undoubtedly described under the name of *coluber fulvius*, from some individuals which had lost their colour in spirits.

We supped with our host, but, according to custom, none of the females of the family were at the meal; but to see the strange guests they contrived to peep through the joints of the doors and shutters. Male and female negro slaves waited at the table. On questioning our kind host on several subjects connected with the state of the country, it seemed as if he either could not or would not communicate any information. The next day being Sunday, we set out, after mass, early in the morning. The heat of the day being excessive, we were glad to refresh with some cold punch and excellent oranges. These we could procure in many districts for nothing; they may be eat in the greatest heat, and in any quantity, without the risque of injury to the constitution, except, as it is

^{*} The parrot, known on the east coast by the name of *siriba*, appears to be of a kind as yet undescribed, and which I have called *psittacus amentatis*. It is about the size of a thrush, and has a long tail like a wedge, and measures 8 inches 11-12ths in length; plumage green; the crown and back of the head brownish grey; cheeks and chin green; between the eyes and ears brownish red; behind the ears, at the side of the neck, a yellowish-orange spot; the front of the neck ethereal blue; on the belly and *iliopygium*, a blood-red spot. *Psittacus erythrogaster* of the Berlin museum.

said, in the evening. With cocoa-nuts, and other fruits, we must practise a greater caution.

Tirica being only three hours journey from Parahi, we soon reached the *Fazenda*, which had formerly been a convent. Here was a respectable looking new church, near which was a range of large buildings for agricultural purposes. We noticed in these parts, for the first time, a disease common among the negroes in the southern provinces of Brazil, largely swollen feet, covered with a hard skin, as in the case of the elephantiasis. We did not find here the hospitality we had received from other planters, and were obliged to send to different *Fazendas*, to purchase provisions, the proprietor of this almost refusing us water. After having spent the night under a bad shed which he had assigned to us, we set out early, but first Mr. Capitam rode up to the house to remind the landlord that we should inform the prince regent how well he had fulfilled the kind intentions of government expressed in our papers. This produced a temporary convulsion, but, foaming with rage, he exclaimed, "What is the prince regent to me?"

Continuing our journey, we met on the borders of marshes, surrounded with high copse-wood, many individuals of the Brazilian lapwings or *guer-guer* (*vanellus cayenensis*) so named from guer! guer! being his usual cry, when startled by any thing. He is very common about all the low grounds; the large swallow, with the white collar, is equally so.*

The heat had now become oppressive; not a breath of cooling air, and the glow of the atmosphere, augmented by the reflection of the sun-beams on the dry deep sand.

In a fine wood through which we passed, our hunters shot a beautiful species of maraoná, (*psittacus guianensis*, Linn.), here very numerous. On the other side of the forest we found a number of Indians, from St. Pedro, repairing the road. After passing over some hills we had a view of the large *Lagoa de Araruama*, or *Traruama*, or *Aruama*, being six legoas long, and very broad; it communicates with the sea at the distance of about one legoa and a half north from Cabo Feio.

A forest and some habitations bordered the opposite banks, and the church of the village of St. Pedro appeared on a distant hill. After riding round a part of the lake, we came to the *Venda*. *St. Pedro dos Indios* is a village (*aldea*) which the Jesuits are reported to have formed originally of Goaytaca-Indians; the village consists of several streets, and has a respectable church, but the habitations are clay-built huts, as are all in the most isolated settle-

* This swallow (*hirundo collaris*) is of a new fine species, about the size of the German cypselus. His feathers are of a brownish black, with green reflexions. The tail-feathers have appendages, projecting about the 12th part of an inch. The heels are uncovered, the toes very strong, compressed and armed with sharp claws, bent downwards, to fasten on the rocks. I found these species first among the rocks in the vicinity of Rio de Janeiro.

ments of these parts being inhabited by Indians. They have here a *capitom mor* (commandant or mayor) of their own nation, distinguished, however, only by his title. Besides the priest, there are but few Portuguese here. The Indians have, for the most part, retained their characteristic features, but their dress and language are the same as of the lower classes among the Portuguese; their ancient language being only known to few of them. Their ambition or vanity makes them eager to pass for Portuguese, and they look with contempt on their ruder brethren in the forest, whom they call *Caboclos* or *Tapuyas*. Their women wear their black hair in the Portuguese fashion, tied in a knot above their heads.

The sleeping hammocks of the family are suspended in the corners of their cottages. We also found among them many earthen vessels, made of a grey-coloured clay. The men are good sportsmen, and well practised in shooting with fire-arms; the boys will shoot very well with small bows, made of any wood, and here called *bodoc*. These bows have two strings, which are kept asunder by a couple of short pieces of wood; in the middle the two strings are united by a sort of net work, upon which the clay bullet or the small round stone (pelotts) is laid. The string and ball are drawn back at the same time with the fore-finger of the right hand, which, being suddenly withdrawn, an impulse is given to the latter. These bows are in use all along this coast, and on the *Rio-Doce*, they are even used by the men, to defend themselves against the Botocudi, who have fire-arms. They are very adroit in the use of them, and can kill a small bird, or even a butterfly, on the flower, as M. de Langsdorf reports, at a considerable distance.

One of the causes of the little cultivation, and indifferent character of these Indians, may be traced to the bad treatment which they formerly experienced from the Europeans, who scarcely consider them as men, and connected with the names of *Caboclos* and *Tapuyas*, entertain the notion of beings merely made to undergo oppression and tyranny. They still evince a propensity for an unrestrained life; they are addicted to strong liquors, and averse to labour—not very punctual in keeping their word, and with none, or very few, distinguished to illustrate their character. They are, however, not deficient in their intellectual faculties, but easily comprehend what they are taught, not without indications of art and cunning. An unrelenting pride and a prevailing predilection for their forests, seem to be impressed on their temperament. Many of them are yet attached to their old prejudices, and the clergy complain of their being bad christians. They are admissible to holy orders, but few as yet have taken them. One individual of the more savage tribes, who had officiated with general respect, for several years, as priest in *Minas Geroes*, suddenly absconded from his parish, and it was found that he had returned

naked among his brethren in the woods, where he had taken several wives. The negroes in the Brazils, very different from these Indians, exhibit ability and perseverance in the acquirement of arts and sciences, and some of them have risen to a certain degree of celebrity.

The dances now common among the Indians are borrowed from the Portuguese; of one of these, called *baducca*, they are particularly fond. Directed by the sound of the viola, (guitar,) the dancers throw themselves into several indecent postures opposite each other, clapping their hands, and making a noise with their tongues. The *caig* is not forgotten here; at present, this is only made of maniocca-root, maize, or batatac; the root is scraped, cut in pieces, boiled, masticated, taken with the fingers out of the mouth, and thrown into a vessel, wherein, with water upon it, it is left to ferment. After this process, it forms a rather intoxicating sourish beverage, in taste not unlike whey. It is generally taken warm.

The way of living in general of these Indians resembles that of the old Indians on the coast. The Portuguese have adopted among other things, this manner of preparing the mandiocca flower. They had formerly a coarser kind of it, called *uy-entau*, and another, rather finer, called *uy-pu*, which name, *uy*, is still known, even among these civilized Indians. They prepared their *mirgau* in those early times, by throwing the mandiocca-flower into their broth, where it rises, and forms a nourishing pap; the Portuguese have also adopted this. They used to pour the mandiocca-flower on their sides, when they were eating, and throw it with so much dexterity into their mouths, that they did not lose a single grain. Their modern descendants, as well as the Portuguese planters, do the same. The old *tupinambas* knew in their time a very good kind of mandiocca-root under the name of *uypi*, which they used to fry in the ashes and boil in water; their descendants, who call the root either by the same name, or *mari diocca doce*, still do the same. Notwithstanding their making a profession of the christian religion, many of them only go to church for appearance, and that but seldom, while at the same time, they are very superstitious, and have many ancient prejudices.

In *S. Pedro*, we frequently conversed with the inhabitants, sitting before their doors to enjoy the cool of the evening. Neither *capitam mor*, a rational old man, nor the other inhabitants, could conceal their suspicion of our being sent as English spies, and even the production of our *portaria* could not entirely remove their doubts. The English politics are not much liked in Brazil; and all strangers, whose light hair and fair skin appear to manifest a northern descent, are accounted of that nation.

As the country seemed to contain much for our examination, we

remained here several days. Our hunters brought us some *micas* (*simia fatuellus*, Lynn. the horned *sohui*) the sloth with the black collar*, a species yet very little known, and some others. We have since found the latter frequently to the south, but never farther north. The following day being Sunday, all the inhabitants for some miles round, poured in to hear mass at *S. Pedro*. We also went to church, before which, withered palm leaves stuck in the ground, the exterior symbol of a fast festival, formed an avenue. A capitam of the name of *Carvalto*, who was also here, was very attentive to us. He had his *roca* (plantation), in the neighbourhood, and in the adjacent *villa* of *Cabo Frio*, a house which he pressed us to make use of during our stay. Here in *S. Pedro* he was our Cicerone, and invited us repeatedly to his dwelling in the neighbourhood. This offer Mr. Sellow accepted. At mass we saw a number of dark brown Indians, retaining their original aspect, a sight not a little interesting to strangers. In the evening they danced in the house of this capitam mor, and were very merry with the *caig* liquor. The clergyman too was here; but it seemed as if he was not held in much account out of the mass.

By the visit which Mr. Sellow had paid to M. CARVALTO, we became, in some measure, acquainted with the various products of the great woods near *S. Pedro*. These forests are filled with the most beautiful wood for timber, as well as with officinal plants. Brazil wood, *pao Brazil* (*cæsalpina Brasiliensis*, Lynn.) is found in abundance; also *ipe* wood (*bignonia*) of different kinds, with great yellow and white flowers, of which one is called *ipé amarello*, but another, which is one of the strongest for ship-building, bears the name of *ipé tobacco*, because its split kernels produce a bright green dusky powder. There is also the *pekeá*, with a fruit agreeable to the human palate, and indeed a common food for monkies. The *pitoma*, *oleo paido* (*laurus*) *ipeuna* (*bignonia*), is the hardest wood of all. As it is elastic and very light, the Indians sometimes make their bows of it. Here is also the *imbiú*, *jacqua*, *grumbari*, and *mazaranduba*, which has a milky sap between the bark and the splint, of which the Indians make bird-lime; the *grauna* and *sergina* (a *cassia* or *mimosa*, which casts off its leaves) one of the prettiest and thickest trees. It is light, can be used like lime and poplar wood, and they make canoes out of it. Here are the *jarraticupitaya*, with an aromatic bark, which is used as a medicine by the Indians, the *jacaranda* or *bois de rose* (*mimosa*), a beautiful black brown, firm and heavy, useful for joiners, and has a faint but agreeable smell, like roses, the white splint is not used, only the inner blackish brown kernel. The *cuxianna* (*cerbera* or

* The sloth with the collar (*bradypus torquatus*, ILLIGERY) is a new species, and as yet nondescript. It is little different in form and make from the *Ai*, its colour is various, a mixture of grey and red, the head more inclined to red, and mixed with white upon the upper part of the neck is a large spot with long black hairs. This species has besides three toes like the *Ai*, and not two as ILLIGER in his *Prodromus* relates.

gardenia) a very light wood, with which spoons and plates are made, and whose bark produces a milky sap; the *peroba*, a hard firm wood for ship-building, which is used by the agents of government, and is therefore declared to be its property; the *canella* (*laurus*), very aromatic, smelling like cinnamon, with the *caubi* (*mimosa*), *mojole*, *sepepira*, *putumaju*, called here, and in Rio de Janeiro, *arariba*; and many other kinds. Official plants are also found here in abundance. I can mention only some of them, as the *herva mocira do sertam*, with a taste similar to cloves, the *ceos-tus arabicus*, which is used for a certain venereal complaint; the *ipecacuanha preta* (*ipecacuanha officinalis*, ARRUDA); no doubt the *raiz preta*, represented in Part 1. of *Eschevege's* Journey in Brazil; *ipecacuanha branca* (*viola ipecacuanha*, Linn. or *pombalia ipecacuanha*, Vandelli), and the *buta* *, which is said to possess the quality of the bark.

After having frequently hunted with the Indians, in the neighbourhood of S. Pedro, we left them in the afternoon, and betook ourselves to Cabo Frio, which was only a few hours journey distant. A delay which one of our mules occasioned, gave us an opportunity of killing a pretty species of *maracana*, which is described under the name of *psittacus macavuanna*; it lives in the woods, and often gets upon the bushes and maize plantations of the Indians, where it does much damage.

Late in the evening, we crossed the *Lagoa* near the *villa* of Cabo Frio, and were received by Capitam Carvalho into his house. *Cabo Frio* is a well known cape; it is formed by high rocky mountains, before which lie some rocky islands. A small fort is built upon one of these small islands, in a bay near the coast. A *Lagoa* enters the land in the form of a semi-circle, and on it lies the *Villa do Cabo Frio*. It is a small place with several unpaved streets, and low houses, of which, however, some have a very neat and friendly exterior. The tract of land on which the *villa* lies, has partly a marshy, and partly a sandy ground, for near to the *lagoas* is marsh, and nearer to the sea deep sand, in which many kinds of bushes grow. Here we discovered some new plants, amongst others, two bushy *andromeda* *, the one with pale yellow, the other with rose-red flowers. The whole surrounding country is covered with lakes and marshes, on which account this country is reckoned unhealthy; but the inhabitants maintain that the strong sea-winds materially improve the atmosphere.

The inhabitants of the *villa* draw their support from the exportation of some products, such as farinha and sugar. Some *lanchas* carry on a coasting trade with it. Formerly this country, like Rio

* We have found this plant so efficacious in its blossom or with fruit, rather difficult to determine to what class it belongs. It is perhaps a *convolvulus*.

† Professor SCHRADER at Gottingen, to whose kindness I am indebted for the determination of most of the plants mentioned in this book, has declared these two plants to be new, and as yet undescribed kinds of this genus.

de Janeiro, was inhabited by the powerful race of the *Tupinambas* and *Tamoyos*, who, in LEARY'S time, were united with the French against the Portuguese. SALEMA attacked them at Cabo Frio in 1572, and defeated them; whereupon they withdrew to the interior of the country. The Portuguese afterwards settled here. In the latter half of the 17th century, a small number of them lived here; the village too of S. Pedro was then built; a small fort was, according to the account in Southby's history of Brazil, almost without garrison.

On the invitation of a capitam living here, to see his sugar-works, we embarked early on a Sunday with him; our host, Mr. Carvalto, and a clergyman, accompanied us. They laid, as usual, reed mats (*esteitas*), on the bottom of the canoe to sit upon. The old *Tupinambas* and the races related to them, made use of this kind of craft; the Portuguese have only preserved them. They are hewn out of a single log of wood, particularly light, and the Indians know how to manage them. They have them of different sizes; some are so small, that one cannot move much, without being in danger of upsetting the canoe; others, on the contrary, are hewn from such immense thick logs, that they are pretty secure even in sea, if it be not too rough. The man who governs the canoe stands upright, and keeps his equilibrium so well, that by his motions he does not cause the slightest shaking. The rudders have in front a shovel of an oblong form, and are managed by the mere hand in small canoes, a few clever *canociros* are capable of pushing along such a light vessel as swift as an arrow. We found the water of the *Lagoa* of small depth, and so clear, that we could plainly perceive the white sandy bottom with its coral beds; this shallowness made us often stick fast. Gulls, sea-swallows, white herons, and strand snipes swarmed around the *Lagoa*.

Two kinds of cormorants are here very common; the greyish brown cull*, and another bird very similar to our cormorant; both are fishing here in the waters, and approach very near the houses of the *villa*. The *fazenda* of the capitam, surrounded by his negro-huts, is built upon a green hill, and has a beautiful situation. Mountains and heights covered with woods and bushes are seen all round, which, contrasting with the shining bright green of the sugar plantations, form an agreeable interchange of colour; on the left, several mirrors of water, friendly dwellings, and distant blue hills, enliven this landscape. We saw the sugar manufactory, which appeared to be very well managed. They pour a strong lie on the sugar-juice, from which they intend to make rum, in order to thicken and purify it. They obtain this by the infusion of warm water on the ashes of a certain kind of *polygonum*, which is called *cataya* in the Indian language, but *herva de bichu* by the Portuguese. This plant has a very bitter peppery taste, is used

* Perhaps the *petit Au de Cayenne*. BUFF. pl. 973. (*Pelicanus parvus*.)

also in many disorders *, and is of great use in the preparation of rum. The most considerable fazendas have a church, a chapel, or a large room, where, on Sundays and feastdays, mass is read. The traveller ought never to neglect mass, for the inhabitants set a very high value on it; they treated us always kindly and politely where we observed this rule, but treated us with coolness and disgust where we did not attend church. After mass we accompanied the host back to the *villa*, where the same day, we observed a curiosity of this country, namely the genuine cocoa-palm (*cocos nucifera*, Linn.) - Farther north this beautiful tree is very common, as the after part of this journey will show, but very scarce in the southern countries. On the eastern coast, it bears the name of *cocos de bahia*.

On a *fazenda* in the neighbourhood of Cabo Frio, were, as I have been assured, two date-palms (*phœnix dactylipra*, Linn.) which bore fruit; but since they have cut down one of them, the other does not bear.

We now made hunting excursions in all parts of the country, and soon obtained different animals, particularly *guariba*, without doubt the species which has been described under the name of *stentor*, or *mycetes ursinus*, and whose loud voice is frequently heard in the woods. This wonderful animal is distinguished by the large stimmencapses in the throat, which Mr. Humboldt, in his observations on zoology, has assigned in his fourth table to another species of this genus. On account of the long beard of the male *guariba*, he bears on this coast the name of *barbado*. In St. Paul he is called *bujio*, and farther north *guariba*. Besides this ape, we caught the one with two long tufts of hair on its head (*simia fatuellus*, Linn.), and the small red sahuí (*simia rosalia*, Linn.) Neither are very scarce here, but are not found farther north.*

On the bank of the lagoas and marshes, particularly in the neighbourhood of the Mangibushes (*rhizophora*, *conocarpus*, and *avicennia*) we found a number of holes in the ground. The dwelling of this kind is here called *guayamú*, it must not be mistaken for another which is taken on the sands of the sea-coast, and bears the name of *ciri*; both kinds are mentioned by MARCGRAF. The *guayamú* is larger than the *ciri*, and has an unspotted dark slate blue colour. These animals are difficult to catch, for at the smallest noise they retire to their holes; I therefore resorted to the means of killing them with sparrow-shot. They form a chief part of the food of the Brazilians, whose indolence often goes so far, that they resort, when they are in want of fish, to this, to our ex-

* On Rio S. Francisco this plant is successfully used in the disease which is called *O Largo*, the enlargement. This disorder is occasioned by an enlargement of the *rectum* caused by weakness, according to the description of an old Hungarian physician, who lived there, and has described the disorders of the country. The plant should be boiled, the liquor which is obtained from it be allowed to cool and then taken as a clyster and bath.

perience, miserable food; in the sand-bushes I frequently found two different kinds of lizards, of which the largest is DANDIN'S *lacerta Ameiva*, and has a green back, and prettily spotted sides. Here too I obtained the skin of an immense serpent, the *boa constrictor*. DANDIM unjustly represents Africa as the only country of this serpent, for it is the commonest of the Brazilian kind of the genus *boa*. The most of this species are known on the east coast by the name of *jiboya*.

Capitam Carvalho promised to send to us at Rio de Janeiro, the considerable collection which had much increased, particularly in marsh and water birds, during our stay at Cabo Frio. We found in the mean time reason to become distrustful of the politeness exercised towards us by this man; for it was but too clear that the greatest self-interest was his motive, for he went so far as to compel us to give him a certificate of the important services which he had rendered to us. We were quite as unfortunate in the acquaintance of the apothecary of this place, a man who seemed to interest himself very much in our labours, and in whom we first imagined some abilities. But we soon observed that he was not quite right in his mind; and notwithstanding our patience with his weakness, we were at last compelled to treat him more seriously, for he spread several prejudicial reports in the villa, for which he nevertheless, as we afterwards learned, was kept some days in confinement by the police.

CHAPTER IV.

JOURNEY FROM CABO FRIO TO VILLA DE S. SALVADOR DOS CAMIÓS DOS GOAYTACASÉS.

Intermediate Stages, &c.—Campos Novos.—River and Villa de S. Joao.—Rio das Oftras.—Fazenda of Tapebucú.—River and Villa at Macahé.—Paulista.—Coral de Battuba.—Barra do Furado.—River Barganza.—Abbey S. Bento.—Villa de S. Salvador on the River Paraíba.

ON the 9th we sent our luggage over the lake, and on the 8th left the neighbourhood of Cabo Frio in the company of Mr. Carvalho, proceeding slowly along the borders of the lake. When we had entered the forest, our mules, which had become intractable by several days' rest, ran away in all directions, and it was a work of some difficulty to get them together again. This trick they repeated, like so many wild colts, throwing off the boxes, breaking and tearing their harness, and it was only by the aid of some Portuguese sportsmen, who were hunting in these parts for

deer, that our *tropeiros* finally succeeded in catching them. The deer are of two different species; Agaro describes them under the names of *guazupita* and *guazubira*, which Mawe erroneously calls fallow deer. The other has well described the four species of stags found in Brazil, and in the greater part of South America. Of these the most common is the *veado mateiro* of the Portuguese, the red-deer or *guazupita*. This animal is common, and the flesh much eaten, though very dry and coarse.

After having marshalled our *tropa* in the best order we could, we continued our march through high forests, frequently interrupted by watery meadows, covered with reed. These, as we expected, were found to be the abode of multitudes of herons, ducks, lapwings, and similar birds. Every where we heard the cry of the *quer-quer*, and in the forest were often entertained with the melodious voice of the *araponga*. Several species of shrubby *eugenia* presented their black, ripe, very pleasant fruit, about the size of small cherries. We rode through stately venerable forests, consisting of slender trees, covered with white or red-brown bark, at the foot of which blooming mimosæ and justiciæ diffused their odoriferous scents. Here we also met with constructions or edifices of the *termita* ant, between eight and ten feet high, indicative of their antiquity. Our mules frequently sunk deep into marshy spots, whilst we had to endure the annoyance of the *marimbondos*, (erroneously called *mirabunde* by Mawe,) a kind of noxious wasp, whose stings produce a violent but short pain, and swelling. The *baginivillaca Brasiliensis* was blooming with the most beautiful red flowers, and the thickly scattered large yellow flowers of the trumpet trees *bigonia* rose high to enliven and embellish the dark tops of the other trees.

In a large marshy meadow the *jibirú*, (*ciconia Americana*, or *tantalus loculator*, Linn.) and several species of herons, particularly the snow-white *egretts*, were seen stalking about with a sort of careless pride. The cattle here have to wade rather deep in water where they feed on the marshy grass. A large serpent, the green *çipo*, (*colibar bicarinatus*,) between six and eight feet long, did not escape our notice, darting by us, like an arrow, through the high grass, and on the bushes, bordering the meadow, we could see a flight of *maracanas* (*psittacus macavuanna*, Linn.) settled. Advancing into another forest, the wild oranges, (*laranja da terra*, of a luscious taste, afforded us a sort of cold collation. The sweet scent of their blossoms attracted a number of colibris. * Leaving the forest, we beheld, on a gentle declivity, rising from a large meadow, the large *fazenda* of *Campos Novos*, or rather *Fazenda do Re*, built, at least in part, by the Jesuits. Near the

* Oranges must be engrafted even in Brazil, otherwise the fruit will contract an insipid, and rather bitter taste.

house of the owner, a *capitum* extends to a range of negro huts, laid out in a square, and forming a small village.

Being obliged to wait here several days for some mules which had stayed behind, we profited of this delay to examine the country. A hunter showed us here the skin of a monkey, called by the inhabitants *mono*. We killed some of them afterwards, and found them to be of the species called *ateles*; * it is the largest kind in all the parts wherein we travelled, and their skin is used by the hunters for covers over the locks of their guns. The forests of *Campos Novos*, at some distance from that *fazenda*, are filled with them. Our hunters had killed several *guaribas*, or *barbados*; one old male ape was brought us yet alive. In the neighbouring marshes, we found, suspended on reeds and grass blades, clusters of fine rose-red eggs of the marsh-snail, described in Mawe's Travels under the name of *helix ampullacea*. This snail is very common in all the dried-up marshes. We also found, in all the forests which we had passed, the large land-snail, shewn by Mawe as a variety of the *helix ovalis*. The colour of this creature is of a pale orange, but that of the house is mostly of a pale brownish yellow. Here we observed, on the branches of the shrubs, the nests of a species of wasp, (*pelopæus lunatus*, Fabr.) made of clay, and about the size and shape of a pear. By breaking it, we found dispersed between the mass from five to six or seven larvæ, or complete wasps. If not the same, it is very nearly related to that described by Azara.

The copse in this region consists of a species of *gardenia*, called here *cuiranna*, a species probably not yet described, making a good wood for timber. Being at some distance from the sea, the woods abound with monkeys and game. The beautiful forest, (*mato virgem*,) which extends in an almost uninterrupted range from *Campos Novos* to the river *S. Joao*, a distance of four legoas, and which we had now entered, was not undeserving of our notice. We soon reached a picturesque marshy spot, surrounded by young cocoa-palms and *heliconia* bushes, which form, as in contrast, the underwood to the large lofty forest trees. The green, blue, and yellow suracua (*trogon viridis*, Linn.) was very common here; by imitating their call we shot several males and females. Here we saw, curiously entwined, the *çipos*, and a particularly beautiful *banisterius*, mostly with yellow flowers, and remarkably shaped stems, also very grand webs of the cocoa-palm, an undescribable ornament of the forest; the *bromelia*, beautifully flourishing in the upper branches. The white

* *Ateles hypoxanthus*, with long limbs, and a strong long tail; the hair pale yellowish grey, often a yellowish red at the root of the tail; the face of a fleshy colour, strewed with blackish dots and spots. Whole length, from the tip of the nose to the end of the tail, 46 inches and 3-12ths. The thumb of the fore-paws is only a short stump, and this distinguishes these animals from *Geoffrey's Arachnoides*, which are without it.

procnias (araponga) was in abundance. The road now lay through deep sand. On a crooked stem I found a serpent of a lead colour, from six to seven feet in length, which I shall designate under the name of *coluber plumbeus*. * First shooting it, we with some difficulty persuaded the negro that had the care of our plants, to carry this harmless creature, wrapped up in a cloth, suspended in a pail, over his shoulders. In the meantime, our hunters had shot several *tucanes*, *arassaris*, (*ramphastos aracari*, Linn.) *surucas*, (*trogon*,) and the small red *sahui*, (*simia rosalia*, Linn.)

Towards evening we reached the banks of the river *S. Joao*, which runs into the sea near the villa which is built here. It is from 300 to 400 paces wide, and is crossed with canoes; our beasts, however, forded it a little higher up. We landed on the other side, near the *villa da Barra de S. Joao*, a small place with several streets, and tolerably good buildings for the country; its church, built by the Jesuits, stands on rather a solitary rock, near the sea shore. This villa is one of the spots where travellers and goods coming from *Minas Geraës* undergo an examination, and are searched, on account of the prohibited exportation of precious stones. We found here five or six brigs at anchor. An English smith, who had settled here, told us that several English ships had strayed to this remote place, and that he intended to procure for himself the appointment of vice-consul. He repaired some of our guns very much to our satisfaction, as being what is seldom to be met with in this country. The want of men capable of repairing guns is severely felt by the naturalist who is travelling in the countries of Brazil. They cultivate, near *S. Joao*, much rice and *mandioca*, and lands hereabouts are said to be very fruitful, particularly up the river; even sandy spots bear plentifully when well watered.

From the sandy isthmus between the river and the sea, on which the villa is built, we wind along the coast farther north. In a plain we found the scarlet *amaryllis*, with a double cup, also yellow-blossomed *banisteries*, and a fine species of myrtle. On our left we had the *Monte de S. Joao*, a towering solitary ridge, at the foot of which were high forests, and in front of these marshes covered with copse-wood, stretching toward the sea.

After traversing several *mandioca* plantations, we came to a fine hill, covered with cocoa-palms, and projecting into the sea, which here received a brook, called *Rio das Ostras*. The waters of this rivulet are clear, and its banks beautiful. A Portuguese married to an Indian woman lives here with his family; he serves in the militia, and is ferryman at the same time. A bridge is

* It was 6 feet, 1 4-12ths inch, long, having 224 belly scales, and 79 pairs of tail-scales. The upper parts are of a dark lead colour, the lower ones of a fine yellowish white, shining like porcelain.

greatly wanted in this place, for no sooner have we loaded our *tropa*, with trouble enough, at *S. Joao*, in the morning, than we are obliged, after a few hours, to unload them again on this spot.

On the opposite bank we took shelter from the rain in some empty loam huts which we found there. Before arriving at the sea-shore, again, on this side, we had to scale hills covered with a kind of cane, from thirty to forty feet high, called *taquarussu*, or the large cane. Its colossal stems of six inches in diameter, bend gently in their rising, the leaves are feathered, and the branches have strong short thorns, which make this thicket impenetrable. These *bambusæ* are very welcome to the sportsmen, for by cutting them under the knot, the stems of the younger sprouts are found to contain a cool, pleasant, although rather insipid, sweetish water, which instantly quenches the burning thirst. This remarkable plant flourishes in mountainous dry countries, wherefore it is most frequently to be found in the capitania of *minas geraes*, where they made drinking cups from its stem. Proceeding along the sea-shore, we found, near some scattered habitations, another useful plant, the *agave foetida*. The smooth, stiff, leaves, from eight to ten feet long, form a strong hedge, from the midst of which rises a stem thirty feet high, bearing at the top greenish yellow blossoms, which give a peculiar appearance to the landscape. The marrow of the stem, called *pitta*, is used by the collectors of insects instead of cork. We now reached the *fazenda* of *Tapebuçu*, situated on a hill near the sea, the owner of which, an ensign of the militia (*Alferes*), received us very well. High forests rise behind the *fazenda*, which is only separated from them by a *lagoa*. From the eminence on which the house is situated, we beheld a plain, covered by an impenetrable wood, in the middle of which stands the *serra de Iri*, an isolated chain of mountains consisting of four or five conical heads, crowned with wood. More to the left, in a southern direction, presents itself the solitary *monte de S. Joao*.

They cultivate on this estate, *mandioca*, maize, and a little coffee; the *lagoa* contains much fish. The orange trees around the habitations attracted a fresh number of colibris. Our hunters killed in the neighbouring forests, parrots, maracanas, tucanes, paves, and other fine birds. Our herbariums too were much enriched here. I found many species of cocoa-palms, among others the *visi*, the fruit of which was just ripe, and the prickly marsh-palms, *tucum*, having a stem about fifteen spans high, which, as well as the stalks of the leaves, are covered with sharp prickles. MAWE mentions the plant, but gives it dented leaves of the shape of a lancet, whilst it, in reality, has feathered *frondes*, the *pinnulae* of which are pointed with full borders. ARBUDA gives a better description of it, but has not examined the blossoms; for the rest

it seems certain, according to M. SELLOW's opinion, that this tree does not belong to the genus of the cocoa. The green *pinnule* have very strong firm fibres; when the leaf is broken, the upper green skin draws off, and the fibres hang free; these are twisted into strong fine green strings, of which particularly beautiful fishing nets are made.

This palm grows here plentifully, and bears small, hard, black nuts, containing an eatable kernel. From another species they take the inner leaf before it is unfolded, draw off the sheath, and separate the leaves, which are adhering together by means of a sticky juice, with which they cover houses; they also make neat mats with them. We found in these dark forests the *ipé* tree, covered with deep yellow flowers, and another *bignonia*, with large white blossoms, grew in the marshes. The proud *sapucaya*-tree (*lecythis ollaria*, Linn.), which towers high above the giants of the woods, has small leaves and large fruit, hanging down like pots, and which actually open by a lid, and pour out their large edible kernel; the monkeys, especially the large red and blue *aras* (*psittacus macao* and *ararauna*, Linn.) are very fond of them. It is, however, difficult to obtain this fruit; for that purpose the tree is commonly cut down. The Indians climb it, particularly by means of the creeping plants or *cipos*, which very much facilitate the ascent. On another hunting excursion, we examined the blossoms of a palm-tree, which, according to M. SELLOW's conviction, is of a new genus. Its fine yellow blossom clusters hung down, gently curved; the *spatha* was large, of the shape of a boat, and as well as the feathered leaves, remarkably beautiful. On felling the tree, we found the wood very hard, but on reaching the porous kernel, it fell immediately.

On the 16th we took leave of the family of our kind host, and entered on our journey to *Macahé*. From Tapebucu to the river *Macahé*, the road leads for four *lagoas* through a deep sand, almost uninterruptedly, along the sea-shore; on some rocky points, projecting here and there into the sea, we discovered a great quantity of mosses and mussels; there was, however, little variety in them. The wind was very high on this spot, and the sea broke itself with great violence against the shore. A range of hills rising from the sandy beach (*praya*) was covered with fine species of trees and shrubs, which were kept down by the wind, and appeared as if they had been clipped; among these we found a large white-blossomed passion flower, of the square *cactus*, likewise with white flowers.

It was now spring, and we had hitherto found the weather rather cool, and never warmer than it usually is in Germany on warm summer-days. The last 3 miles and a half of the journey led through a thick forest, where we shot *tucané*, *arassarís* and the small blackish cuckoo (*euclides tenebrosus*). Many species of trees

of the tender species were now without leaves, though most of them keep theirs during the winter in Brazil. The greater part were now budding, some were in blossom, and others bore blossoms and fruit at the same time. Drenched with rain, we arrived at the *villa de Macahé*, on the river of that name. This river, of a tolerable size, after having flowed for about fifteen *lagoas* along the *serra de Iriri*, empties itself here into the sea. In the time of Livy, this district was inhabited by savages, who called it *Maghé*, and were in war with the *Uetacas* or *Goaytacases* on the river *Paraíba*.

The small *villa de S. Joao de Macahé* lies scattered among bushes on the bank of the river, which forms at its mouth, a circle round the projecting nish of land. The low houses are, for the most part, cheerful and neat, built of clay and timber, and white washed. They have court-yards formed by stems of the cocoa-tree, in which goats, pigs, and different sorts of poultry are running about. The inhabitants carry on some trade, with the produce of their plantations, consisting of tarkina, beans, maize, rice, and a little sugar; they also export timber, for which reason there is always some small coasting craft, *sumacas* or *lanchas* at anchor. The *Gorulhos* or *Guarulhos* Indians are said to live, united in villages or *aldeas*, up the river in *Sertam*. After having been compelled by the rainy weather, to stay here for some days, we collected some fine seeds of trompet-trees, and other husk-plants, and set out again on a Sunday afternoon.

A fresh rain accompanied us for one *lagoa* and a half into an underwood and forest along the sea-shore, as far as the *fazenda de Baretto*, where we arrived at night, and took possession of an empty house. In some marshy meadows and forests, we saw numbers of shining insects flying about, among others the *elater noctilucus*, mentioned by Azara, with two bright green shining dots on the breast.

The night-swallow (*caprimulgus*), in whose loud cries the Portuguese pretend to discover the words *joao corta pao*, flew very frequently with a gentle flight, about the dark forest roads, and often sat down on the ground before us. It reminded us of the European owl (*strix aluco*, Linn.), whose place it fills here.

The bad weather continuing, we remained during the 18th of September at *Baretto*, and increased our collection by some interesting birds. I shot a couple of the white and black milan, with the forked tail (*falco furcatus*, Linn.)

We were glad to leave *Baretto*, our people having got to serious fighting in the two public-houses of the place. On account of the deep sands along the sea-shore, we arrived late this day at the place of our destination. We met on the road with mimosa hedges round the gardens of some habitations, and a domesticated cocoa-tree (*cocos nucifera*) loaded with fruit, a true scarcity in this neigh-

bourhood. We proceeded then through mandiocca-fields, where the plants were placed between the cut and burnt wood, and the ground raised round them, as is done with the potatoes in Europe; farther on we passed through marshy spots, with upright white-flowered little bignonia stems, and high forests. The ruins of a large house, besides other objects, made us conclude that the district had been formerly in a better state of cultivation. We noticed an incredible number of *urubus* (*vultur aura*, Linn.) which had collected round some carrion, and seemed so little afraid, that they were actually sharing their booty with a large dog, and did not suffer themselves to be disturbed by our presence. We also saw here large flights of long-tailed parrots, (maracanna's and perikitto's.) All those that we shot had their beaks dyed blue, from a certain fruit which was just then ripe. We shot some *tucanes*, and commonly perceived, on the highest dry branches, single birds of prey watching for their booty, especially the lead-coloured falcon (*falco plumbeus*, Linn.) which rushes with a bold swift flight upon its victim.

Here we also saw the tree, called by the Portuguese *tento*.* It has dark-green feathers, red leaves, and bears short, broad husks, with fine dark-red beans, which the Portuguese use for counters, (*tentos*.) We did not see its blossoms. The sand-bushes produce here a great many interesting plants. In marshy places we found a tree from eight to ten feet high, apparently related to the *bonnetia palustris*, with large white flowers, a fine species of *evolulus*,† a small *cassia*, with yellow blossoms a pretty blooming creeping *asclepiadeca* (*echites*) with fine white and rose coloured flowers, a new *andromeda*, with deep red flowers, and the two species of *andromeda*, already found at *Cabo Frio*, with several others.

Towards evening our caravan reached the sea-shore, where the ruins of an old chapel, in a melancholy, dreary, sandy country, completely harmonized with the wild roarings of the foaming sea, small stunted bushes grew towards the wood, and bore testimony of the strength of the prevailing winds. We continued our journey upon a small neck of land between the sea and a long extended *lagoa* till night, when we reached a single shepherd's habitation, called *Paulista*, where our hungry stomachs found nothing but a little mandiocca-meal, and some maize for our beasts; luckily we had provided ourselves at *Baretto*, with some salt-meat (*carne seca*) and beans (*feigoês*). As the house was pretty large we remained here the following day, in order that we might rest from our fatigue. The Brazilian aysterlaters (*hæmatopus*) ran in crowds about the shore, and many of them were killed by us. In the neighbour-

*This is the *armosia coccinea*. *Jacks*. in the *Transact. of the Linn. Society*. A new species, which was first found in *Guinea*. *Willdenow* does not mention it.

† A new species, neither described by *Persoon*, *Willdenow*, *Ruiz*, nor *Pavon*.

ing woods, which were mingled with cocoa-palms, we shot several very small owls, of the kind which the inhabitants call *caburé*,* but which must not be mistaken for that so called by MARCGRAF. We felled some palmetto-palms, which are frequent here, on account of their pith; this tree belongs to the neatest and slenderest of the cocoa kind; its stem is a thin, high shaft, covered with rings; a small top of from eight to ten; bright green leaves of the shape of quills move high above in the air; under this beautiful head ornament stands, on the silver grey stem, an addition of the lively green colour of the leaves, in the upper part of which the young leaves lie rolled and folded together, they contain, in their middle, the tender yet unopened blossoms, but those already formed break out from under the green cover. If this addition to the stem for the cover of the young leaves be cut off, the interior is found so tender and pithy, that it may be even eaten raw, but when it is cooked it is a still better food. We found the wood very hard, and it cost not much trouble to cut down the tree with the wood-knife (*facao*.) The *toccam* palm was likewise blooming in marshy places, as also in the sandy parts were a new kind *stachytarpheta*, and a pretty round *cactus*, similar to the *mammillaris*, which has in its upper surface white wool, which contains small deep-red flowers. Mr. Sellow considered this kind to be new. Our ornithological collections were not much increased here, for excepting a few marsh-birds, we found very little that was new. The *sabia da praya* (the coast-thrush, *tardus orpheus*, Linn.) sings along the whole of this coast, which, with but an indifferent plumage, has a beautiful note, and may be reckoned one of the finest singing-birds in Brazil. The small white *gecko*† was very frequent on the buildings, running about the perpendicular walls, as also the lizard with the black collar;‡ they are spread over the whole of the country that I have seen. On the banks we found very few mussels, and also here in the marshes we saw the above-mentioned nest of a kind of wasp, (*pelopæus lunatus*, Fabr.)

From *Paulista* we followed the downs. Large marshes and *lagos* grown over with reeds, in which the grazing cattle and horses are often wading to the middle, extend into the country; lapwings

* *Strix ferruginea*, 6 inches 7-tenths long, rusty-red, with some pale yellow or white spots on the scapular and wing feathers: a great white spot on the under part of the neck; tail unspotted, rust colour; the lower parts of the body bright yellowish and mixed with white, with rust-coloured long stripes; iris deep yellow. This owl, without ears, seems to bear some relation to Azara's *Caburé*.

† Probably Daudin's *gecko-spinjeanda*.

‡ *Stellio torquatus* appears to be related to, or the same with *stellio quetz-paleo*—Daudin. This species varies very much in colour. When young it has dark long stripes on its back, which disappear when it grows old; then it turns to a silver-grey, spotted with shining purple, and copper-coloured, and sometimes, brighter dots; the criterion of the species, however, is always an oblong black spot, on the side of the neck, before the shoulder, as likewise three dark stripes running down in a perpendicular direction over the closed eye-lids. The lizard with the black collar is called on the eastern coast *lagarta*.

(*vanellus cayennensis*), herons, gulls, sea-swallows, and ducks, were in great hunter, the lapwings called *quer-quer* fly about the head of the hummer, when he approaches these young ones, like our species in Europe. Upright cactus trees opened their white flowers, they had square, pent, and hexangular branches, but seemed nevertheless to belong to one or, at most, to two species, for these strange prickly plants vary much in the number of their points according to their age. A prickle of a cactus plant entering into an animal's hoof or joint, easily lames it. In the sand we found the *turnera ulmifolia*, and in the marshes two white-blooming nymphæa-species, the *indica*, and another, named by Mr. Sellow, *erosa*, with very large flowers; also, a high white blooming *alisma*, probably also new, with narrow, oblong leaves. This large wilderness is covered with wild cattle, even at a distance of from 18 or 21 English miles from any human habitation. They are annually collected by the owners of the neighbouring *fazendas*, once or twice into a *coral*, or place surrounded with palisadoes, where they are counted and marked. We took up our night-quarters in the so-called *Coral de Battuba*, five legoas from *Paulista*, which contains within the fence a large loam hut. The country is a large plain (*campo*), frequently containing water in its shallow depth, which afterwards forms the *lagoas*.

Our provisions being very short, we attempted to kill a beast, but did not succeed that evening. In the hut, which let in the rain through the roof, we got but little rest, being at the same time tormented by an immense number of fleas, and by a host of *bichos do pé* (Sand-flea, *pulex penetrans*), of which we drew, on the following day, a great number out of our feet. This insect penetrates between the skin and the flesh, on the feet, about the soles and toes; sometimes, also, through the nails of the hands. But it is an exaggeration so say that they penetrate even to the muscle-flesh, as they remain between the skin and flesh. Their presence is felt by a violent itching, which afterwards changes into a slight pain; therefore it is well to prick them out immediately, without injuring their body, filled with eggs. By rubbing a little snuff, or *unguentum basilicum*, which is to be had from the apothecaries in Brazil, into the small wound, after the insect is taken out, all inflammation is prevented.

Notwithstanding the morning being dull and rainy, we renewed our chase, and at last succeeded in killing a heifer, which serving to satiate our hunger, we betook ourselves to hunting. We killed an ibis, with a naked flesh-coloured face, described by AZARA under the name of *curucau rasé*, likewise two species of falcons, a fine new species of kite,* and the *falco busarellus*, with a rose-coloured

* *Falco palustris*, 19 8-12 inches long, a yellowish white (owl-crown, like our *falco evancus*), mixed with dark brown, surrounds the head; over the eye a white stripe; lower parts of a reddish pale yellow, with dark brown long stripes; lower part of the

body and yellowish white head. Near the house I found a nest of the bentavi (*lanius pitangua*, Linn.) with eggs in it, which has the shape of a baker's-oven closed at the top.

In the large lagoas in the plains north of *Battuba*, innumerable marsh and water-birds are to be found. We fell in with about thirty of the rose-coloured spoon-heron (*platalea ajaja*, Linn.) but notwithstanding all our precautions, we could not succeed in killing one. The lagoas are separated by dams, upon which we found bushes in which there are always some birds of prey, of which we killed some. On the border of a lake, I perceived the antunga, (*plotus anhinga*, Linn.) At a distance of from four to five leagues from *Battuba*, we came to a place called *Barra do Furando*, where the lagoon *feia* is connected with the sea. The lagoon *feia* is usually ruffled by the wind, and therefore often dangerous for canoes; for larger ships it is often too shallow. At low water the *Barra do Furando*, is blocked up. This whole district contains a great many lakes along the coast, several of which are not marked in the maps. With this quantity of water, and the fruitfulness of the soil, this district might be made one of the most fruitful in Brazil, if it were inhabited by a more industrious people.

Having embarked our baggage on the lake, we continued our road along the downs, amusing ourselves with the sight of many plovers, (*charadria*), strand-snipes, and oyster-fishes (*hæmatopus*), which were picking up a number of small insects, as often as the waves retired. The great number of ducks and marsh-birds which we found here, was really remarkable. Large blackish flights of the *anas viduata*, Linn. and of the whistling green-shouldered species, described by AZARA under the name of *ipecutiri*, rose at our first shots like a sheet. This latter species is the most common in that part of Brazil which I have seen.

As it was growing late, and we could not cross the lagoon that evening, being at the same time threatened with a heavy fall of rain, we returned a little distance back to a small hut, where five or six soldiers were watching to prevent the smuggling of diamonds. The soldiers lit a good fire for us, gave us mandioca meal and dried salt meat, and we chatted all the evening with them. These militia soldiers, of rather a brown colour, wear white cotton shirts and trowsers, their necks and feet remaining naked; each of them wears, like all other Brazilians, his rosary about his neck. A musket, without a bayonet, is their only arms. In the day-time they are fishing in the lagoas, which furnish them with food, besides the mandioca meal and salt meat which is given to them. They have, therefore, ropes made of twisted bulls' skin, extended before their huts, on which they dry the fish. The hut, being a guard-house, contained several rooms,

neck dark brown; thighs and rump rust-red; all the upper parts dark brown; pinions and tail-feathers ash-colour with dark brown cross-stripes.

with some long mats and wooden benches to sleep on. The canoe with the hunters, who had been delayed by the docks, only arrived in the morning, and now the passage begun. Whenever a boat's load was passed, the men in it distributed themselves for the purpose of hunting. Among other things, they shot the ibis, with a red face, (*carao*,) and the *caracara*, (*falco Brasiliensis*,) a fine bird. United upon the northern bank, we remained exposed the whole day to a heavy fall of rain, (some of our mules having been led away by some horses,) till, towards the evening, a fisherman arriving took us into his hut, where we waited for the fugitive beasts. We went now, through a small underwood, to the banks of the river *Barganza*, a discharge from the *Lagoa Feia*. Here were two miserable fishermen's cabins, where we were well received. They merely consisted of a cane roof, supported against the ground, containing a couple of small compartments within. our numerous train was, therefore, obliged to sleep in the open air, there being only room for the Europeans, not inured to the climate. We slept with the families, round about the huts, upon straw, the fire burning in the centre; and they treated us with baked fish and mandiocca meal. The good will of these people alleviated a part of the inconveniences to which we were exposed. In the hut in which I slept was a very stout talkative woman, of rather a tawny complexion, who, according to the custom among the Brazilian women of the lower classes, was constantly smoking her pipe. The Brazilians use more frequently segars made of paper, which are carried behind the ear; which fashion of smoking the Europeans learned from the *Tupinambas*, and other tribes of coast Indians, who used to wrap certain aromatic leaves into a larger one, which they lit at one end, (J. de Lery, Voyage &c. p. 189). The pipes in use among the lower orders in Brazil, have a small head of burnt clay, of a blackish colour, with a thin smooth tube, made of the stalk of a high fern, (*samambaya*,) the *mertensia dichotoma*. The Brazilians, of all ranks of society, are yet more fond of taking snuff than of smoking, the poorest negro slave having his snuff-box, made of horn or tin, frequently merely a fragment of a cow-horn, secured with a cork.

As soon as the morning dawned upon us, our fisherman's family began saying their prayers, after which they bathed their children, according to the common practice of the country, in lukewarm water, which the little ones seemed to anticipate with impatience. Cane mats were then spread on the outside of the huts, and we all sat down to a breakfast of boiled fish. Our meal being concluded, the fishermen prepared their canoes to get our mules over the *Braganza*, which is here filled with reeds, by swimming. Thousands of aquatic birds have their nests here; among others, we saw at times the fine red spoon-heron. Among

the fishermen that were passing our *tropa*, we were particularly struck with the appearance of one old man, with a long beard, and a sword by his side; a younger one got on horseback, in order to be our guide through the inundated meadows. His dress was peculiar; he wore a small hood of cloth, a short coat, and trowsers which left his knees bare, and spurs on his naked feet. This little man was, however, very good natured and kind, always riding before us, and seeking, not without danger to himself, the best passages. After suffering under the just apprehension of losing our baggage in the water, we at last, under a heavy fall of rain, reached the end of these meadows.

The last watery spot we crossed in a boat near the church of *S. Amaro*, and our *tropa* now proceeded on immensely large green plains, which already make part of those of the *Goaytacases*, that, extending as far as the *Paraiba*, and from which the *Villa de S. Salvador* is surnamed *dos Campos dos Goaytacases*. Between the grass of this track of land, as well as in all pastures along the eastern coast of Brazil, grows the *sida carpinifolia*, with a shrubby woody stem and yellow flowers; it grows very fast, and frequently shelters a species of *inambu*, denominated *perdiza*, (partridge, described by *Temminck* under the name of *tinamus maculatus*). This yet little known bird resembles our quail in colour, but is rather larger, and stays as long before the setting-dog as our European partridge. After having rode over these plains, in which a great many cattle were grazing, till the evening, we arrived at the large abbey of *S. Bento*. This convent, which belongs to the abbey of *S. Bento* in *Rio de Janeiro*, is possessed of considerable estates. The building itself is large, has a fine church, two court-yards, and a small garden in the interior, in which the beds, walled up with stones, are occupied by balsamines, tuberoses, &c. In one of the court-yards stood lofty cocoa-nut trees, (*cocos nucifera*, Linn.) loaded with fruit. The convent possesses fifty slaves, who have built their cottages, in a large square, before it; in the middle of which a cross is raised, on a pedestal. Besides, there are here a large sugar *engenho*, and other buildings for agricultural purposes. Besides the large estates belonging to this rich convent, it is possessed of large herds of horses and black cattle, and receives the tythes from some sugar in the vicinity.

We were here well received, and lodged in rooms with beds, from the large unglazed windows of which we enjoyed a beautiful prospect. In the lower story of the house were the kitchen and mandioca manufactory, where we dried our collections; the cotton which we wanted for them was freed for us from the grains. We spent our time in shooting ducks, which we found here in immense numbers on the large marshes and *lagoas*.

A mulatto, with a stiletto in a button-hole, a sword at his side, and spurs on his bare feet, served as our guide on our farther

journey. The increasing habitations, and the traces of the wheels in the plain, indicated that we were approaching a more populous neighbourhood. Along the road we saw hedges of *agave* and *mimosæ*, behind them blooming orange and banana trees, and near the houses coffee-trees, with their milk-white blossoms. The *vendas* become very frequent on the road, from the doors of which the smiling posts invite the passengers, but usually to pick their pockets. It was yet early when we arrived at the *Villa de S. Salvador*, situated on the southern bank of the river Paraiba, in a pleasant, fruitful, variegated country. Our kind host from *S. Bento* had assigned to us his house here, where we saw the first newspaper since our departure from Rio; it contained the news of the defeat of the French near Waterloo, which greatly interested even the inhabitants of the town.

CHAPTER V.

Residence at Villa de S. Salvador, and Visit to the Puris at S. Fidelis.

THE plains, which extend northward from the river *Paraiba*, were formerly inhabited by the savage and warlike race of the *Uetacas* (*) or *Goyatacases*, ranked by *Vasconcellos* among the *Tapuyas*, from the difference between their language and that of the people of the *Lingoa Geral*. They separated into three tribes, the *Goaytaca-assu*, *Goaytaca Jacorits*, and *Goaytaca Mopi*. Contrary to the custom of the other Indian tribes, they wore their hair long and hanging down, and were distinguished from all their lineage by a clearer colour, a firmer structure of body, and a greater degree of savageness; and they likewise fought more boldly in the open field.

The whole country is covered with detached *Fazendas* and plantations; and, on the south bank of the *Paraiba*, which flows through these fruitful plains, at the distance of about eight leagues from the sea, an important *Villa*, deserving the appellation of a city, (*Cidade*) presents itself. *Villa de S. Salvador dos Campos dos Goaytacases*, contains from five to six thousand inhabitants; the population of the whole district being about twenty-four thousand souls. This place, in general called simply *Campos*, is tolerably built, with regular streets, for the most part paved, and neat agreeable houses, many of which have several stories. Close balconies with wooden lattice-work, according to the ancient Portuguese fashion, are still common here. Near the river there is a square, on which stands the public edifice, in which the courts of justice are held, and where also are the jails. In this town there are seven churches, five dispensaries, and one hospital, in which there are about twenty patients. A surgeon has charge of the hospital; and this country has besides better practitioners than are to be found in the other districts of the coast, where medical aid worthy of confidence is often unfortunately sought for in vain. The town is very pleasantly situated, stretches for a considerable space along the beautiful

* JEAN DE LEVY voyage, &c. p. 45.

Paraiba, and affords an agreeable prospect, especially when viewed from the road leading to the river. The bank is every where alive, and an active concourse of men, generally of colour, employed in commercial and other occupations, are here in constant motion.

A considerable trade is carried on at *Campos* with produce of various kinds; but on the lands up the *Paraiba*, the sugar-cane is principally cultivated; and also on the small river *Muriaché*, which falls, on the north side, opposite *S. Salvador* into the *Paraiba*, considerable sugar-works are found. Coffee, cotton, and every other species of produce, thrive admirably; and even the growth of Europe is seen in their markets. The chief object of attention is, however, sugar, and the spirit obtained from it. Among the inhabitants there are persons of property, who conduct their sugar establishments close to the river with sometimes more than 150 slaves; and from such works, besides the rum, from 4 to 5000 arrobes of sugar are made in one year. The improvement of the works is already in agitation, and the use of the steam-engine is proposed. In the year 1801, there were calculated to be then on the *Paraiba* and *Muriaché* in this district, 180 sugar works, among which 89 of the larger were found to be very profitable.

There appears even now in this town a considerable degree of luxury, especially in apparel, in which the Portuguese are very expensive. Cleanliness and neatness are to this people, in Brazils at least, universally common. But, if the interior parts of the country, or the less important *villas* are visited, it will be generally observed, that the planters remain fixed to their ancient habits, without ever thinking of the slightest improvement of their condition. Rich people are there to be found, who, though they send in the course of the year several *Tropas* laden with goods to the capital, and sell perhaps 1000 or 1500 oxen, occupying miserable hovels, one story high, composed of mud, and not even white-washed; with which all the rest of their domestic arrangements completely accord, except cleanliness of dress, which is seldom wanting. The country of the *Paraiba* does not seem to possess a sufficient stock of cattle, though these plains are so well adapted for breeding them: a few mules are indeed reared but they are not so strong and handsome as those of *Minas*, *Geraes*, and *Rio Grande*. The sheep and goats are small, and hogs do not succeed here so well as in other countries. I had not come to *Campos dos Goaytacases* to collect statistical information, (for which I must consequently refer the reader to other works) but in order to learn the natural and national characteristics of the country; which object being here speedily accomplished, my

stay was therefore of short duration ; and we hastened to visit what was to us the most interesting curiosity on the *Paraiba*, a neighbouring tribe of yet more uncultivated *Tapuyas*.

We quickly prepared ourselves for this alluring journey, and set out on the 7th of October, leaving our baggage behind us, but accompanied by an officer and a soldier, politely assigned to us as guides by the commander of the districts of *S. Salvador*, *Manoel Carvalho dos Santos*. The *Paraiba*, already laid down in Mawe's little map of his journey to *Tejuco*, rises in the *Capitania* of *Minas Geraes*, flows between the *Serra dos Orgãos* and that of *Mantiqueira*, in an easterly direction, and having received the *Parahibuna*, *Rio Pomba*, and other contiguous streams, rolls, bounded by mountains, through the vast natural forests till it enters, near its mouth, into the plains of the *Goaytaca*—Indians. But we were soon deprived of the view of the beautiful river, along which our route at first lay, and the banks of which we found ornamented with the *Mimosa*, the *Bignonia*, and similar productions of nature. Near the town there stood some lofty palms, which were succeeded by fine meadows and groves. In the pasturages we found large flocks of the *Crotophaga Ani*, (Linn.) the *Cuculus Guira*, (Linn.) or *Annu Brance* of the Portuguese. This bird, which is mentioned by *Azara* under the name of *Piririgua*, has not been long known in the country of *Campos*, and seems only to have come down within these few years from the highlands of *Minas* to the plains upon the sea. We had abundant occasion to be delighted with the beauty and fertility of these regions. A row of large *Fazendas* occupy the bank of the river, and extensive sugar plantations are intermixed on the lively plains with wide pasture-grounds, where graze large cattle and horses, and some mules. In a meadow, adjoining several dwellings, we beheld with admiration one of those colossal fig-trees, *Figueiras*, of the Portuguese, which may be esteemed one of the most propitious of Nature's gifts to hot climates. The shade of this stately tree revives the traveller, when he takes up his rest under its incredibly wide-spreading branches covered with shining dark-green leaves. In the higher boughs of this tree we found the curious nest of the little green *Todus* with a yellow breast. It was of a globular shape, formed of wool, and close at the top, with only a small entrance. In Brazil a far greater number of birds build these close nests than with us ; probably because there the tender fledglings have more enemies. At some miles from *S. Salvador* the mountains began to rise ; and, on the other side of the sugar-cane grounds, we already perceived in the distance the high natural forests. In the woods red spots were conspicu-

ous which arose, however, merely from the young leaves of the *Sapucaya*-tree, which, on their breaking out in the spring, are of a rosy hue. It was now the most favourable season of the year for travelling, as the sprouting foliage every where exhibited itself in the most delightful variety of colours; a lively verdure adorned the landscape, and the agreeable temperature of the air was extremely grateful to us natives of the north, and unaccustomed to much heat.

After a journey of about three hours we again approached the *Paraíba*, and were strongly affected by its beauty at this place. Three islands partly overgrown with old and lofty woods interrupt the smooth course of the water, whence the stream, not inferior in breadth to the German Rhine, glides rapidly along, exchanging, on the green hills which distinguish its banks, woods and groves with large *Fazendás*, the red-tiled roofs of which present an agreeable contrast to the green foliage, and around which the huts of the negroes afford an appearance of little villages. One of the plates presents a view of a country-seat of this description. The valleys which intersect the banks are filled with marshes, in which a high-growing species of *Bignonia* creates the semblance of a decayed forest. Both trunk and branches are of an ashy grey, and their thin dark-green leaves give them a very dull melancholy aspect; and the more so, as they always grow crowded together in plots: the flower is however pretty, large, and of a white colour. There is here a number of other beautiful plants; and, among the rest, a tree-species of *Cleome*, thickly overspread with very large white and rose-coloured tufts of flowers. The yellow and white *Bignonia* diversified our road, and the upright stems of the *Allamanda Cathartica*, (Linn.) with large yellow blossoms, adorned the productions of the bank. When we had accomplished the half of our journey, our guide conducted us to a *Fazenda*, the master of which, a captain, politely invited us to dinner. In the front of his house, which, from an easy rise commands a most beautiful prospect of the river, there stands a majestic *Bignonia* of the species called *Ipe Amarello*, covered with large yellow flowers, which burst out before the leaves. Its timber is very firm, and may be easily wrought.

Resuming our journey in the afternoon, we ascended the *Morro de Gamba*, a steep hill on the bank of the river, and, having ridden along its ridge through a thick wood, we were surprised, when we again entered into open space by a magnificent view of the river below. The remarkably rocky eminence of the *Morro de Sapeteira* was particularly conspicuous, and in contrast with the green cheerful hills, on which the inha-

bitants had built their smiling abodes, heightened the charms of the scene. Immediately under our feet, at the bottom of the steep side of a mountain, there was a small flat spot of meadow ground, where a number of habitations, erected under high palm-trees, formed a delightful group. Our narrow path ran high up the ridge, and then sank down again into the vale, where, as we approached each *Fazenda*, the senses were regaled by the sweet smelling bloom of the orange-tree. We then arrived at a marsh, over-grown with reeds, and the greyish-white-blossomed bignonia rising from 20 to 30 feet in height. On the branches of the latter a great many birds of the *Ardea Nycticorax* species, differing only in size from the German *Nycticorax*, had built their nests, and on every nest the old and young were standing together viewing the strangers with curiosity. Our huntsman shot some of them, but could not get them out of the bogs. These marshes, though we did not see any, are said to breed a great number of *Jacare's* (*Crocodylus*). After traversing a pleasant diversified country, we arrived about night-fall at the *Fazenda do Collegio*, and reached, before it was quite dark, the little *Rio do Collegio*; the deep flowing stream of which, though completely drenched, from our cattle having fallen, in consequence of the slipperiness of the footing, we all passed in safety.

We soon after entered a thick natural wood, on the bank of the river, which extends to *S. Fidelis*, a distance of half a league. It was now dark night; the road was very narrow, often rising suddenly over the steep bank, extremely uneven, and blockaded with dry wood and fallen trees. The soldier, who led the way, skilled in the road, dismounted with our people to clear the passage, and we were frequently compelled to lead our horses through considerable tracts of ground. At length a steep and deep ravine, across which a bridge formed by the trunks of three trees had been thrown, presented itself before us. But this obstacle, though it nearly cost us some of our cattle, we however likewise overcame by patience. A number of fluttering insects sparkled in the darkness of the forest, the *Caprimulgus* screeched, the large *Cigararras* were apparent at a great distance, and the peculiar cry of a host of frogs, resounding through the solitary, nocturnal wilderness. We then arrived at a level meadow on the bank of the river, and suddenly found ourselves among the huts of the *Coroados-Indians* at *S. Fidelis*. Our guide immediately rode up to the house of the Reverend Pater *João*, and requested, through one of his slaves, quarters for the night, but we received a brief refusal, and had it not been for the kindness of the Officer, in whose house we were so well entertained at noon, we must

have lodged beneath the open sky. In the unfurnished and almost empty dwelling of this man, we however, found accommodation and slept soundly.

S. Fidelis on the beautiful bank of the *Paraiba*, here tolerably broad, a village of the *Coroados* and *Coropos* Indians, is a Missionary station, and was established about 30 years ago by some Italian Capuchin monks. There were then four Missionaries, of whom one still remains; a second lives at *Aldea de Pedra*, seven or eight *Legoas* farther up the river; and the other two are dead. The Indians, who live at this place, belong to the race of the *Coroados*, *Coropos*, and *Pures*; the last of whom, still wild and free rove about in the utmost state of barbarism betwixt the sea and the northern bank of the *Paraiba*, and spread westward to the *Rio Pomba* in *Minas Geraes** opposite to *S. Fidelis*: they hitherto appear peaceable, but at *Aldea de Pedra* they have lately been at war with the *Coroados*. The principal residence of both these tribes is *Minas Geraes*, but they extend hither on the *Paraiba* and the sea coast. On the right or southern bank dwell the *Coroados*, and at *S. Fidelis* some *Coropos* who are now all civilized, that is to say settled. Their boundaries stretch to *Rio Pomba*. On the left bank of the river they are still in a state of nature, though they build better huts than the *Puris*, with whom they live in warfare, and by whom they are said to be feared. These Indians are, as has been stated, almost all settled, the *Coropos* entirely, the *Coroados* for the greater part; yet they have scarcely begun to lay aside their wild manners, customs, and sentiments; for only four weeks before our arrival, the latter, at *Aldea de Pedra*, had shot a *Puri*, on one of their expeditions, and celebrated in consequence a grand festival for several successive days.

Scarcely had the morning appeared, when we betook ourselves to the huts built by the Missionaries for the *Coroados* and *Coropos*. We found these men still extremely original, of a dark brown skin, a completely national countenance, strongly marked features, and raven-black hair. Their houses are very good and roomy, built of mud and wood, and roofed with palm leaves and reeds, like those of the Portuguese. Their ordinary clothing consists of white shirts and breeches of cotton stuff, but on Sunday they are better dressed, and not to be distinguished from the poorer classes of the Portuguese, though even then, the men often go bare-headed and bare-foot: the

* The *Corograsa Brasilica* (Vol. 2. p. 59.) describes the situation of the *Puris* on the lower *Paraiba* incorrectly; for, according to that account, the savages live here already collected into villages, which is not actually the case.

women, on the contrary, are more nice, sometimes wear a veil, and are fond of ornamenting themselves. They all speak Portuguese, though among themselves they sometimes use their native language.

The languages of the *Coroados* and *Coropos* are nearly allied, and the *Puris* generally understand both. Our young *Coropo Francisco* spoke all the three languages. The difference of language among the various tribes of the primitive inhabitants of Brazil is an interesting subject, and worthy of close investigation. Almost all the tribes of the *Tapuyas* have a peculiar language. From the similarity of a few unconnected words among so many different dialects, attempts have been made to trace the origin of this race to the European nations, but certainly without foundation. *Papa* and *Mamma*, it is true, signify among the *Cambevas* or *Omaguas* exactly what they imply with us,* and the word *Ta* may in the *Coropo*-tongue have the same meaning as in German, but except such unimportant and accidental instances of agreement, there exists not the slightest analogy between these languages and the idioms of Europe. The peculiar arms of the *Coroados*, and to which they still much adhere, consist of bows and arrows, which differ only in some slight respects from those of the *Puris*. The feathering of the arrows is chiefly obtained from the red *Araras* (*Psitticus Macao*, LINN), which are found higher up the *Paraiba* at *Aldea da Petra*. In these arms, like all their kindred tribes, they are very expert, and they occupy themselves much in hunting in the woods before their huts.

Our most important object was now to form an acquaintance with the barbarous *Puris* in their primitive woods. We proceeded therefore to the opposite bank of the *Paraiba*, and received a very good reception at the house of a *Furriel*, who immediately sent his brother into the forest to inform the *Puris*, that strangers wished to speak to them. This was an unequivocal sacrifice offered by our host to his courteousness towards us; for these people not only bring him no advantage, but even occasion him much injury. When they are amicably treated they come down to the vicinity of the plantations, but even then they use the productions of the estate, as if they had been intended for themselves; and often rob the negroes, who have business in the adjacent woods, of their shirts and other clothing. This horde of *Puris* had their station not long since at *S. Fidelis* and are supposed to belong to those who

* *S. de la Condamine, Voyage, &c. p. 54.* Even among our Antipodes, the New Zealanders, children call their father *Pah-Pah*; see *Collins's Account of the English Colony in New South Wales. Lond. 1798, 4 p. 535.*

appeared in hostilities at *Muribacca*. This much is at least certain, that they received at *S. Fidelis*, with incredible rapidity, the account of a murder committed by one of their people on the sea coast, which proves that they have a very near communication across the woods; and it also appears, that they maintain an intercourse from the coast to *Minas*.* The situation of our entertainer's *fazenda* was extremely agreeable, as it stood on the beautiful *Paraiba*, which is here in many places as broad as the Rhine. The thick, dark, and lofty forests are diversified by the pleasant verdant hills which compose the bank of the river, and on which numerous *fazendas* are erected. In some parts these wild picturesque woods spread widely out, even on the bank, and extend, without interruption, back into the country in all directions. From the higher ranges of the mountains, dark and awful vales are seen intersecting the wilderness, gloomy and thick, and filled with trees of gigantic height; nor is their stillness often interrupted even by the head of a solitary skulking *Puri*. Behind the *fazenda* we ascended a hill, and had there a sublimely beautiful, though terrific view into the vast tremendous desert. Scarcely had we rejoined the numerous company assembled at the foot of the height, when we beheld the savages issuing from a side valley, and advancing towards us. They were the first of these men whom we had seen, and our joy at their appearance was equal to our curiosity. We hastened forward to meet them, and stood before them overcome by the novelty of the spectacle. Five men and three or four women had accepted the invitation to come and see us, and were accompanied by their children. They were all of short stature, none being taller than five feet five inches, and generally, women as well as men, broad and thick made.† With the exception of a few, who had clothes bound round their middle, or wore short breeches received from the Portuguese, they were all perfectly naked. Some had their entire head cropped; while the naturally strong and raven-black hair of others, only cut over the eyes and in the nape, hung down their necks. The beard and eye-brows of some were cut; but in general they have little beard: it forms, with the greater part, only a thin wreath round the mouth, and hangs

* In *Minas* they are yet numerous. It was here attempted to transplant them, and make slaves of them, in order to civilize them; but this purpose completely failed. *Eschwege's Journal*. Heft. 1. S. 98.

† Among all the inhabitants of the East coast whom I saw, I must consider the *Puris* the least. According to *Freyreiss*, these men are more strongly made in the *Capitania* of *Minas Gerais* than the *Coroados*; but this I did not find confirmed at *S. Fidelis*.—*Eschwege's Journal*. Heft I. S. 205.

nearly three inches in length below the chin.* Some had red spots painted on their forehead and cheeks with *Urucu*, (*Bixa Orellana*, LINN.) and on the breast and arms they had all made dark-blue stripes with the sap of the *Genipaba*-fruit; (*Genipa americana*, LINN.) these are both the colours which the *Tapuyas* use. Around their neck, or over their breast and one shoulder, they wore a string of threaded, hard black-berries, in the front part of the centre of which there were interwoven the corner teeth of apes, ounces, cats, and other animals of prey, though many had necklaces of this kind without teeth.†

The men carried in their hands long bows and arrows, which as well as all their other property they readily bartered for trifles. We received these extraordinary beings in a friendly manner. Two of them had been brought up when children among the Portuguese, and consequently spoke a little of the language of the latter; whence they are often of the greatest use to the *fazendas*. We presented them with knives, rosaries, small mirrors, &c. and divided among them small bottles of rum. We then announced to them our intention to visit them early in the morning in the woods, if they would receive us kindly: after this, and when we had promised to bring agreeable presents for them with us, they left us exceedingly pleased, and returned with loud shouts and singing into their wilderness. Scarcely had we set out in the morning, when we perceived the Indians again issuing from their woody valley. We sprang forward to meet them, regaled them with spirits, and hastened with them to the wood. As we rode round the sugar-works of the Fazenda, we found the whole horde of *Puris* stationed there on the grass. This naked, brown-skinned multitude, presented a most extraordinary and interesting spectacle. Men, women and children crowded together, regarded us with a mingled aspect of timidity. They had all decorated themselves to the utmost of their power: a few of the women only wore a covering round their hips or over their breast, the rest were perfectly naked. Some of the men had ornamented themselves with a piece of the skin of the ape called *Mono* (*Ateles*,) bound round

* Many writers have run into a great error by calling the Americans beardless, although their beard is generally thin and weak. In *Sypotuba* there is said to have lived a race of the Aborigines, who being distinguished by a stronger beard were thence stiled *Barbados* by the Portuguese.

† The ornament here alluded to consists of dark-brown, hollow, longitudinal bodies, which in shape are very similar to a *Dentalium*, and are therefore supposed to be of animal origin, till stricter examination shews that they are formed from a bark substance, and are hence, without doubt, the hull of some thorn. They may be produced on the *Caxowids* of the *Paraiiba*.

their forehead. Some of the women carried their little children by the means of bands fastened over the right shoulder, and others on their back, the band being fixed across their forehead, which is also their usual method of carrying their provision-baskets on their expeditions. Some of the men and young women were much painted; they had the red points on their forehead and cheek, and, in part, red streaks on the face; on the body of others were to be seen black streaks, both lengthwise and across, intermixed with points; and several children were covered all over with the same description of small black spots. The mode of painting seems to be a mere matter of taste, and quite arbitrary among them. Some of the females wore bands round their heads; and it is besides a custom with them to wear a tight band round their ancles and wrists, in order, as they say, to render those parts slender and elegant. The figure of the men is in general stout, thick, and broad, and often very brawny; the head thick and round, the face broad, and generally with strong prominent cheek-bones; the eyes small, black, and sometimes awry; the nose short and broad, and the teeth very white. Some, however, were distinguished by sharp features, small, curved noses, and very lively eyes, which, in a few instances, had a friendly expression, but, in general, sunk beneath the projecting forehead, cast forth a black stern glance.

One of the men was distinguished from all the rest by his Calmuck-physiognomy; he had a thick round head, the hair of which was cut off to the length of an inch; a very muscular squab body; a short broad neck, a large flat face, a small nose with wide nostrils, a thick mouth, thick black eye-brows, highly arched, and squinting eyes, somewhat larger than those of the Calmucks usually are. *Von Eschwege* adduces, as a peculiarity of the *Puris*, the smallness of the male sex; but I must confess, that I found in this respect no remarkable difference between them and the other tribes; the *Puris* are usually very little, and the whole Brazilian race is, in this point, inferior to Europeans, and still more so to the Negroes.

All the men here carried large bows and arrows. Some of the South American people, however, especially those on the *Maranham*, use short-feathered lances of hard wood; and others as those of *Paraguay*, *Motto Grosso*, *Cuyabá*, *Cuyana*, and the *Tapi*-tribes on the east coast of Brazils, make use of short clubs, though every where the chief arms are the bow and arrow. Only a few tribes who inhabit the places of South America, the *Pampas* of *Buenos Ayres*, and some countries of *Paraguay*, being always on horseback, use, as their principal weapon, a long lance, and carry a small bow and short arrow.

The Tapuyas of the east coast, on the contrary, use as their only arms an immense bow and arrow, which, like the *Paya-guas* in Paraguay, they do not carry in cases, but, on account of their extraordinary length, merely in their hand. The bow of the *Puris* measures more than 6½ feet. It is smooth, formed of the hard, tough, dark-brown wood of the *Airi-Palm*, the string being of *Grawathr* (*Bromelia*.) The arrows of the *Puris* are more than six feet long, and made of strong knotty reeds, (*Taquara*,) growing in the dry woods, and mounted at the lower end with fine blue or red feathers, or with those of the *Crax Alector*, Linn.; or the *Jacutinga* (*Penelope Leucoptera*;) the arrows of the *Coroados* are made from a different reed, with small knots. The arrows of all these tribes are of three kinds, distinguished by their points. The first is the proper war-arrow. It has a broad top, made of the plant already mentioned, under the name of the *Taquarussu*, (*Bambusa*,) cut sharp on the edges, and brought in front to a very fine point. The second kind has a long point of *Airi*-wood, with several barbs on one side. With the third sort, which has but a blunt point, and is furnished with several knobs, they shoot small animals. None of the tribes which I visited on this coast use poisoned arrows; for, luckily, the ingenuity of these people, which is still at a very low ebb, has not advanced so far.

Our first curiosity being satisfied, we requested the *Puris* to conduct us to their huts. The whole troop immediately proceeded, and we followed on horseback. The road led into a valley, where we crossed the sugar plantations, after which the path became narrow, till we arrived at a few huts, (*Cuari*, in the language of the *Puris*,) in the thick wood, which may certainly be ranked among the most simple dwelling in the world. The hammocks, which they form of *Embora*, (inner rind of a sort of *Cecropia*,) is fastened between the stems of two trees, and to both these a little higher up, a cross-piece is fixed, against which large palm-leaves are laid in an oblique direction on the windward side, with a bedding below of *Heliconia*, or *Pattioba*-leaves, and, in the neighbourhood of the plantations, of Banana leaves. On the earth near a small fire, lie flocks of the *Crescentia Cujete*, or some calibash-shells, a little wax, various trifling articles of ornament, canes for arrows and arrow-heads, a few feathers, and provision, such as the banana and other fruits: the bows and arrows of the master stand against one of the trees; and lean dogs attack with a loud bark the stranger that approaches the wilderness. The huts are small, and so exposed to the weather, that the brown inhabitants are often seen thronged together in a crowd around the fire, and seated among the ashes to procure shelter from

the storm; at other times, the man lies tranquilly stretched in his hammock, while the woman keeps up the fire and roasts a piece of flesh on a pointed stick. Fire, called *Poté* by the *Puris*, is one of the chief necessities of life to all the Brazilian tribes; and they never let it go out even in the night, because, being destitute of clothing, they would sink under the cold without it, and because it keeps off all wild beasts. They leave these huts without regret when the surrounding country ceases to afford them sufficient nourishment, and remove to places where more animals of chase are to be found. Their game, when prepared for food, has a very disgusting appearance, as they tear it asunder, half raw, with their strong white teeth, and the skin is not taken off, but only singed black. They also tear to pieces the flesh of their enemies out of revenge; but there remains no trace among the *Tapuyas*, of the east coast at least, of their eating their dead, in order to shew the last mark of affection towards them, as some old authors declare.* The Portuguese maintain, and with apparent probability, that they consume the flesh of their enemies, but this they would never confess, and in their replies to our questions on the subject, ascribed the custom only to the *Botocundos*. Mawe, the English traveller, relates, that at *Canto Gallo* they eat unplucked fowls; but this I never witnessed among savages, and here they even gut them; so that it must have been a mistake of Mr. Mawe.†

As soon as we reached the huts a traffic commenced. We presented the women with rosaries of which they are very fond, though they tear off the cross and laugh at the sacred relic of the Catholic Church. They also delight in woollen caps, knives, and red handkerchiefs; the women are highly pleased with mirrors; but scissars they do not value at all. In return they willingly gave us a great many bows, arrows, and carriage-baskets. These baskets are composed of green palm-leaves; which exhibit when they lie upon their back a bottom of wicker-work, and on the sides is a high rim; above they are generally open, and only laced over at certain distances with string or bass. The savages bring a great number of balls of wax for sale, which they collect from the wild bees. They use this wax, which is of a dark-brown colour, in preparing their arrows and bows, and also in forming candles, which they sell to the Portuguese. These candles burn very well, and are made by winding a wick of cotton round a thin piece of wax, and rolling the whole firmly together. They set a

* Southey's Hist. of Brazil, Vol. X. p. 379. † Mawe's Travels, &c. p. 121.

high value on their knives, which they carry attached to strings tied round the neck and hanging down the back; and which often consist merely of a piece of iron, though by constantly whetting them on stones, they render them very sharp. If a knife is given to them they generally break the handle, and make a new one after their own taste, by tying the blade tightly in between two pieces of wood.

When we had finished our barter, we remounted our horses and proceeded towards some other huts situated farther up the wood. The way was toilsome, full of tree-roots, and constantly ascending and descending over hills; some of the savages swung themselves up behind and rode with us; and a whole troop of *Cozoado* Indians from *S. Fidelis* accompanied us on foot. We found in the thick wood, in a small solitary valley, the house of a Portuguese, who lived among the *Puris*. Henceforward the way became easy, and we soon reached the huts of many savages, where a multitude of lean dogs again assailed us. The *Puris* seem to have had these dogs from the Europeans; they call them *Joare*, and I found them among all the aboriginal tribes on the east coast.* In the huts there were, in particular, a great number of women and children; and in some of them several hammocks, though one only was in general to be seen. One Puri sold his hammock to me for a knife: others bartered their ape-skin browbands, their necklaces, &c. M. Freyreiss treated with a Puri for his son, and offered several things for him. The women gave their advice loudly in their peculiar singing tone, and sometimes with sorrowful gestures: most of their words ended in *a*, and were drawled out, which occasioned a noisy, curious concert. It was evident that they were unwilling to give up the boy; but the head of the family, an elderly grave man, spoke a few impressive words, and then stood in deep thought, with his head sunk downwards. Two knives, a shirt, a handkerchief, some strings of glass pearls, and a small mirror, being ultimately offered to him, he could not withstand the temptation, but immediately brought a youth out of the wood, who being ugly and ill-made was rejected; after which the savage brought a second, of a more agreeable exterior. The indifference with which this youth learned his destiny is incredible: he never changed countenance, took no leave, and seated himself, perfectly contented, on the crupper of Mr. Freyreiss's horse. This insensible indifference, under events both of sorrow and of joy, is found to exist among all the

* Von Humboldt found in Spanish America naked dogs; we saw nothing similar on this coast.—*Ansichten der Natur*. §. 90.

American people. Their most important object of solicitude is food; their appetite is constantly craving; hence they eat generally in haste, and with greedy staring eyes, their whole attention being fixed on the provisions. The sugar plantations of the *Fazendas*, in the neighbourhood of which they take up their station, generally allure them; and they may there be seen sitting and sucking the cane for half a day. They even cut off large pieces of this plant, and carry it with them into the woods. The sap of the sugar-cane is not, however, liked by the *Tapuyas* only; for the sucking of it is a common custom with the lower classes in Brazils. *Koster* says the same of *Parambuco*.

On returning from the wood, we rode back with a *Puri* behind each of us to the *fazenda*; where the whole body, both men and women, presently assembled and demanded refreshment. The man who rode behind me, stole my pocket-handkerchief, and though, when surprised in the fact, he promised to give me his bow for it, contrived to mingle with the crowd, and avoid my notice. They might be easily managed by a friendly line of conduct; but the planters treat them in a most erroneous manner, considering them as beasts, and immediately speaking of the *Chicote*, or whip, which naturally excites them to anger, and engenders hatred and strife. With us strangers they were much pleased, on account of our upright and good behaviour towards them; and they observed from our light coloured hair, that we belonged to a different nation. They give the name of *Rayon* to all white persons. As the *Fazenda* would not admit of a *Farinha* to entertain all these persons, the master of the house, to satisfy their loud clamours for food, gave us a small swine, which we presented to them, with orders to shoot it for themselves; and thus obtained an opportunity of seeing with what savage cruelty they prepare animals for their sustenance. A hog was eating near the house; a *Puri* stole up to it and wounded it above the chine; it ran off squeaking and trailing the arrow after it. The savage seized another arrow, and having struck it in the fore-shoulder-blade, caught it. The women had in the mean time hastily lighted a fire. When we had all collected at the place, they again shot the swine first in the neck, and then in the breast in order to kill it. The animal was not however quite dead, and lay crying and bleeding piteously; but, without much consideration or suffering themselves to be moved by its yells, they cast it alive into the fire to singe it, and laughed with one accord at the sounds which pain forced from it. Our loud expression of displeasure at this barbarity, however, increasing, one of them advanced and stuck the tortured animal

in the breast with his knife, after which he scraped off the hair, cut it into pieces, and divided it. (*) From the smallness of the swine, many of them returned unserved and displeased to their forest; but scarcely had they departed, when a sack of meal arrived for them from *S. Fidelis*, which we sent after them.

Barbarous insensibility is, as this and many other examples evinced to me, the chief feature in the character of these savages. Their manner of life leads to this consequence; for it is the same circumstance that renders the lion and tiger blood-thirsty. A spirit of revenge, a certain degree of jealousy, an invincible inclination to freedom, and an unsettled, uncontrolled life characterize these people. They have generally several wives, some even four or five, when they can support them. They do not usually ill-treat their wives, but the husbands consider them as their property, and they must act according to their will; hence, while the man walks at her side carrying only his weapons in his hand, the woman goes loaded like a beast of burden. Some authors, and among the rest *Azara*, have denied all notions of religion to these American nations; yet this assertion seems to be so much the less warrantable, as this author has himself communicated the opinions of some of the Indians from Paraguay, which, without doubt, have their foundation in a yet imperfect system of religion.† For myself, I have found, among all the tribes of the *Tapuyas* that I have visited, demonstrative proofs of a religious belief; hence it is with me an irrefragable fact, that there is not a single nation of the earth totally destitute of religious ideas.‡ The wild Brazilians believe in various mighty beings, of whom they acknowledge the most powerful in the thunder, under the name of *Tupa* or *Tupan*. In the appellation of this supernatural spirit, many tribes, and even some of the *Tapuyas*, agree with the *Tupi*-tribes or the Indians of the *Lingoa Geral*. The *Puris* ascribe to him the name of *Tupan*, which *Azara* also quotes from the language of

* As little as on the present occasion, did I find any where afterwards confirmed what *M. Freyreiss*, says in the 1st part. S. 208 of *V. Eschwege's Journal of Brazil*; viz. that the savages never eat the flesh of animals which they have killed themselves.

† *Azara*, Voyage, &c. Vol. II. p. 34 in the note.

‡ That the Minister at *Joao Baptista* does not allow that he found any idea of religion among the *Coroados* proves nothing; for as he grants that religious notions exist among the still more uncultivated *Puris*, the *Coroados* must certainly likewise entertain some. It is indeed now ascertained that they fear a powerful supernatural being called *Tupan*. *Von Eschwege's Journal*.

the *Guarani*; another proof of the affinity of this nation with the race of the east coast. Idols are no where seen among the *Tapuyas*, and it is only on the river Amazon, that certain images have been found, which seem to have a connexion with the religious creed of the inhabitants. The greater part of the Indians of South America have an obscure idea of a great deluge, and various traditions of this event, current among them are collected in *Simam de Vasconcellios, Noticias curiosas do Brasil*.

We did not accept the invitation of our kind host to remain all night, but returned to *S. Fidelis*, where, finding the Indians greatly displeased, because we had given so much to the Puris and nothing to them, we bought from them, by way of satisfaction, some more bows and arrows. We then visited Pater João, before the window of whose house flows the beautiful *Paraíba*, of which there is here a most noble prospect. It is the most considerable river in the *Capitania* of *Rio Janeiro*, containing before its debouchement, near *S. Fidelis*, 72 islands. The stream was at this time at its least height, but in the rainy season, December and January, it overflows its banks.

From this place there are two roads, one to *Minas Geraes*, the other to *Canta Gallo*. This latter place derived its origin from some gold searchers, and remaining long concealed in the great forest, received its name from being at length discovered by the crowing of a cock.* When the Jesuits established themselves in the country around *Canta Gallo*, it was inhabited by a very white race of Indians. The first settlers obtained gold sand, brought in proper cases to the *Paraíba* by the Indians, in exchange for trifling articles.

Having again left *S. Fidelis* we returned to the house of the *Furriel*, whither the purchased boy was also brought, to see what effect it would have upon his relations; but, to our great surprise, no notice was taken on either side, and such complete indifference maintained as I never witnessed in any other tribe. They are not however deficient in affection to their younger children; but the son being deemed his father's property till he can provide for himself, the latter pays little regard to him after that period.

Taking leave of our host and the Indians, we rode down the left bank of the *Paraíba*, in order to gain a knowledge likewise of this side, which is indeed as well cultivated and diversified as the right. We saw great *fazendas* surrounded by noble trees, among which, we found the *Sapucaya*, with its

* Mawe's Travels, Cap. IX. p. 120.

young rose-coloured leaves, and covered with large flowers of a peculiar form in full bloom.* We halted at the house of *Senhor Moraes* who had prepared some subjects of natural history for us. Some Families of *Puris* came meanwhile up, and encamped near the house. These savages have a particular affection for this worthy Planter, who always treats them in a friendly and ingenuous manner. Without regarding the considerable damage which they often occasion to him, he always allows them the pillage of his orange and banana-trees, and of his sugar-cane fields. A man such as he, who possesses their love and respect, will be the first to succeed in withdrawing them from a state of savageness, and uniting them in *Aldeas*, or villages. On our again setting out, he accompanied us through hilly ways down the bank where we had often to pass over difficult places on the steep precipices; we then entered a grand gloomy forest, in which very beautiful butterflies were fluttering about. We found here close to the bank a small island surrounded by steep rocks, on which stood some old trees covered with the bag-formed nests of the *Cassicus hæmorrhous*. Plantations of sugar-cane, rice, and coffee, but of the last not many, and islands, partly cultivated and partly overspread with wood, added variety to the scene. Towards evening we arrived at a considerable *Fazenda*, built on a plain near the river, where, being well received, we resolved to spend the night. On the opposite side of the valley rose a high mountain, and on this the *Morro de Sapeteira* with several tops.

On the following morning, after our horses had been collected on the meadow, we continued our journey, and arrived at mid-day at the *Muriähe*, which, though not broad, is deep and rapid, and occasions much damage in the wet seasons. It rises in the *Serra do Pico* in the territory of the *Puris*, is said to be navigable for seven leagues, and has one *Caxocira*. On its banks there were considerable fazendas, where much sugar is cultivated. A small canoe carried us over the stream, and by evening we reached the spot, where the *Villa de S. Salvador* extends itself on the opposite bank. At this part we found an old Indian village, *Alde de S. Antonio*, which the Jesuits had formed of the *Corulhos*-Indians but which now contains no *Caboclos* among its inhabitants.

* In an essay by Captain *Marlier* in *Von Eschwege's Journal*, S. 113, this tree is improperly called the *Cocus de Sapucaya*; it has nothing in common with Palms.

CHAP. VI.

JOURNEY FROM THE VILLA DE S. SALVADOR TO THE
RIVER ESPIRITO SANTO.

*Muribacca—The hostilities of the Puris—Quartel of the Barreiras
Ita pemirim—Villa Nova de Benevente, on the Iritiba—Gorap-
raparim.*

ON our arrival at the Villa we made the necessary preparations for our farther journey northward along the coast; engaged two new hunters, and a soldier to act as a guide; and, having taken leave of the commandant, and other inhabitants from whom we had experienced civilities, we left the Villa on the 20th of November, and followed the bank of the *Paraíba* to its conflux with the sea. The town extends to some distance on the bank of the river, and affords a beautiful prospect. The thick mass of roofs, partially overtopped with lofty palms, rises above the stream, here tolerably broad, and constantly crossed by canoes managed by negroes; while the back-ground presents a view of the distant blue mountains.

Our journey was this day very toilsome, partly because our cattle had become wild through too long rest, and partly from the necessity of making openings in the herd enclosures, which both detained us and threw our sumpter-beasts out of their proper order. We saw in this neighbourhood very fine steers; and, indeed, in the Brazils generally, this useful domestic animal is full of flesh and well made. The ox-hides of *Buenos Ayres*, *Monte Video*, *Rio Grande*, and other parts of Portuguese and Spanish America, are famed for their size; and the horns of the cattle are also much larger than they usually are in Europe. Horses are here likewise bred in abundance. The country was variegated and agreeable; and several national curiosities presented themselves; among the rest the bluish Halcyon, (*Alcedo Halcyon*, Linn.) of which we obtained some specimens. About noon we arrived at the house of a *tenente*, who being from home his wife afforded us accommodation; he returned,

however, during the night, and accompanied us in the morning towards *Villa de S. João da Barra*. The weather was excessively hot; the swamps of the woods, nearly dried up, appeared overspread with a thick covering of yellow and whitish butterflies, which were seeking moisture. This concourse of butterflies to wet grounds is a sure harbinger of the hot season; and they may sometimes be seen like clouds swarming about a piece of water. The view of the *Paraíba* was concealed from us by bushes; and the sandy soil proved that we were near the sea. When we had reached the bank of the river, a species of hunt, completely novel to us, presented itself, being that of the *Jacare*, *crocodilus scolrops*, or alligator of this country. This amphibious animal lives in all the rivers of the Brazils, and especially in marshy places and standing water. The last are easily discovered by certain large-leaved water-plants, *Nymphæa Pontederia*, the branches of which spread their leaves horizontally over the surface. Among these the experienced observer perceives the *Jacare*, peeping its head lurkingly out of the water, though it is sometimes seen in the middle of the stream, especially in dead, slow-running brooks. Thick bushes with slender stems from eighteen to twenty feet in height, belonging to a tree furnished with large woolly heart-shaped leaves, (apparently a *Croton*) very nearly related to the *Tridesmys*, (*Monœcia*) covered the shore of the *Paraíba*. Between these it is easy secretly to approach the bank and view the *Jacare*, as it basks with its head above the water, watching its prey. As at first we approached the water without thinking of these creatures, or observing the necessary silence, we heard the noise which they make on diving into the river; and this, inducing us to proceed more carefully to learn whence it arose, we found the *Jacares* to be the cause of it. With a double-barrelled gun, loaded with middling shot, I hit one of these animals in the neck; it sprang up, rolled itself on its back, and then sank down. We destroyed three or four more in the same manner, but had no means of getting any one of them out of the water; our huntsman, however, having killed one in a slow running stream at a little distance from us, we were enabled, on coming up to them, to procure a man and canoe from some neighbouring fisher-huts, who, searching the bottom of the water with a fork, brought up the animal. This *Jacare* was about six feet in length, of a grey greenish colour, with some dark cross stripes, especially on the tail; the under side of the body had a bright yellow unmixed appearance. Greatly rejoiced to possess this beautiful, and to us yet novel creature, we placed it upon one of our beasts of burden; whence it diffused widely around a most disgusting musk-odour. The *Jacare* of the east

coast of Brazils is far inferior in size to the huge crocodiles of the old world, and even of those countries of South America which are situated nearer to the equator.

The Paraíba nourishes an extraordinary number of Jacares, and they sometimes serve the negroes for food. Many fables are reported concerning their rapacity; but those mentioned here, being of a species not exceeding eight or nine feet in length, nobody fears; though the fishermen shew the scars of their bites on their feet, and it may be maintained, not without foundation, that a dog swimming over the river was once caught and consumed by them. In the brook where our *Jacare* was killed we could count several of them at a glance, but having shot too widely at some of them we rendered them shy of us and could not obtain another. Not far from the brook we found on the sandy ground bushes of the *Eugenia Pedunculata*, a known beautiful shrub that produces the pleasant-tasted, red, pulpous, four-cornered fruit, which is known in the country under the name of the *Pitanga*. It sits singly on its *pedunculus*, and the entire plant is covered with it; it afforded us an agreeable refreshment. The *Acajú*-tree, (*Anacardium occidentale*, Linn.) was at this period in bloom. At length we arrived at the *Villa de S. João da Barra*, not far from the mouth of the *Paraíba*. By the intervention of our conductor the *tenente*, the *Casa da Camara*, or place of residence for the crown-servants, was assigned to us. It is a commodious house with many good rooms, and a court-yard in which orange and goyava-trees (*Psidium pynferum*, Linn.) are planted, and which were now partly in bloom. *Villa de S. João da Barra* is a place which cannot be compared to *S. Salvador*, having only one church and unpaved streets, with mean single-storied houses, built of wood and clay. But, on the other hand, the river is here navigable for pretty large vessels, brigs, and sumacas, and there exists an immediate communication with the sea: all ships bound for *S. Salvador* must sail past it, though the arm of the river near the place is shallow, and the proper course lies on the farther side of some islands. The inhabitants are almost all sea-faring people and fishermen, to whom the trade of *S. Salvador*, in the produce of the country, affords support. Our hunters, who had gone on before us, had obtained various animals, and had also brought with them alive two of the *Dasyus* kind. These curious creatures are common in the Brazils, and there are various sorts of them. Those which we possessed are here called *Tatu-peba*, but in most parts the common or real *Tatú*, *Tatu verdadeiro*, and afford a very palatable food. During the night we had separated both the animals, putting one of them into a sack, and confining the other in a strong place; the former as we found, on wishing

to feed them in the morning, had scratched a hole in the sack, and worked its escape through the thick mud-wall of the building. We spent two days at *S. João*, one of which was consumed in preparing our *Jacare*. The *Juiz* (judge or burgomaster) supplied us with sailors and four large canoes to transport our baggage across the river, the surface of which was rendered so rough by the wind that small craft would have been in danger of upsetting. We constantly heard the roaring of the sea, while, much lower down the river, we coasted round a pleasant island covered with bushes. Among these were a shrub species of *Cleome*, with large white and yellow tufts of flowers and scarlet stamina; the *Malvacea* from twelve to fifteen feet high, with large flowers of a faint yellow colour; and the *Aminga*, a remarkably high-grown species of *Arum*, (*Arumliniferum*, *Arruda*) with large oval fruit and whitish flowers. We now crossed the second arm of the river and a small canal traversing two islands, in which the water, shaded on all sides by high wood, is completely stagnant, and consequently full of *Jacares*. The *Conocarpus* and *Avicennia*, with their bare-bowed roots springing high out of the stem, formed a curious web on the bank, between which we sometimes saw the *Jacares* basking on old stumps and stones; but the motion of the boat defeated my efforts to shoot them. At the outlet of this canal we found on the banks of the island a number of the blue Halcyon, (*Alcedo Alcyon*, *Linn.*)

Without making any further discoveries we were obliged to content ourselves with having found two species of the *Fucus*,* which is also met with at *Rio de Janeiro*; and catching in a small narrow Lagoa, a Cormorant, with a bill very similar to our Cormorant, (*Carbo Cormoranus*) of which bird there were large flocks diving about, but they were very shy. Northwards from this place, the coast at some distance from the strand is overgrown with a variety of plants, among which the *Pitangeira*, (*Eugenia Pedunculata*) with its well-tasted fruit; a new species of *Sophora*, with yellow bloom; the hexagonal Cactus, and other species of the same genus, are particularly abundant. Messrs. *Ereyreiss*, *Sellow*, and myself, having hastened on before our *tropa*, reached ere night the only *fazenda Madinga* lying on the sea-shore; where our people, detained by a very narrow channel, did not arrive till morning. We met here the *Correo*, or letter-post, which goes from *Rio* to *Villa de Victoria*, but not farther north; and received letters which furnished us with agreeable conversation for the evening. From *Madinga* we proceeded northwards along the sea-shore, wading through

* *Fucus lendigerus*, (*Linn.*) and a middle-sort of *Fucus*, *incisi folius*, and *latefolius*, *Turn. Hist. Tirc.*

deep sand, always wet. This sand-road is pleasant and convenient for the traveller, but the mules and horses unaccustomed to the view and noise of the surge often take fright. A troop proceeding over the smooth white sand at the edge of the azure sea, is, when seen from a distance, an agreeable object; for when the coast has no considerable curves the prospect extends so far that the cattle diminish to points. On the projecting headlands, where the shore has to sustain the strong shock of the breakers, we observed stones perforated by the water in a most extraordinary manner.

After we had followed this *praya* for some leagues, a path conducted us to *Lagoas* surrounded by high woods. Extreme thirst tormented the whole troop; but the waters of the *Lagoas* were salt from the overflowing of the sea, and two huts, in which we hoped to be able to refresh ourselves, were deserted; the well-tasted petangas which grew around in great numbers partly indemnified us, however, for our disappointment. As I was afterwards riding on before our people through the high forest where our way then lay, examining the beautiful plants, and occupying my thoughts upon the *Tapuyas*, who often infest these parts, I suddenly beheld, to my no small astonishment, two brown coloured men standing before me. I was about to secure myself against any probable attack with my gun, but I found them to be lizard-hunters.

The solitary planters of this wilderness are fond of the large species of lizards, which, in the language of the Indians of the east coast, are called *Tein* (*Lacerta Teguixin*, Linn.) They are caught by the aid of dogs trained to the game, which, as soon as they approach a lizard, dart as swift as an arrow into its hole, whence it is dug out by the hunter. The men whom I here saw, being quite naked and tanned from head to foot, might easily have been taken for *Tapuyas*. They carried hatchets, and had with them a brace of large lizards, four feet long including the tail; and assured us that we should reach the *fazenda*, at *Muribacca* where we expected to arrive in less than an hour. We soon after entered into the inclosure which announced the district of this place. In the shady lofty forest we found beautiful plants; the shrubs were highly entwined by the noble *Convolvulus* with azure bells. The *Jus* *

* *Tinamus noctivagus*, a new and hitherto undescribed species of *Tinamus* or *Inambu*. It is less than the *Macuca* (*Tinamus brasiliensis*, Lath) thirteen inches, five lines long; the upper part, dark grey--reddish brown; the back, chesnut brown; the head, strong ash blue--spotted black; the lower back and dropygium, reddish rusty brown, but all these parts of the back are streaked across with dark brown; chin and neck whitish; under part of the neck, ash grey; breast, a lively brownish rust--yellow; belly, paler coloured.

made his loud deep whistle resound in three or four notes he is heard in these immeasurable deserts, at all hours of the day, and even at midnight. The flesh of this bird has a very disagreeable taste, like that of all the rest of his kind which is generally denominated *Tinamus* or *Inambus*. When we had emerged from the forest we found ourselves in extensive newly formed plantations. Here on a height, where ancient trunks of felled trees lay piled, like a barricado, one across another in every direction, a beautiful prospect burst upon the sight of the majestic wilds on the banks of the *Itapabuana*; which, like a vein of silver, issues winding from the dark forests and meanders through a green plain, on which, surrounded by large plantations, the great *fazenda* of Muribacca presents itself.

Immense woods bounded the horizon. The numerous negroes of the plantations stood gazing with astonishment at our troop, which, as it emerged from the wood, seemed like the vision of another world. We first reached *Gutinguti* which bears with Muribacca, the common name of the *fazenda* of *Muribacca*; it formerly belonged to a territory of the Jesuits, nine leagues in length, who founded this settlement; at present it belongs to a company of four proprietors. There are already here three hundred negro slaves, of whom, however, only about fifty are strong able men, all entrusted to a *feitor* (Manager,) by birth a Portuguese, who received us in a very friendly manner. The labour of the slaves, consisting chiefly in rooting up the woods, is here extremely hard. The plantations consist chiefly of mandioca, millet, cotton, and some coffee.

Near *Gutinguti* flows the *Itapabuana*, a small river, which when highest waters the meadows. The Chorography of Brazil calls it improperly *Reritigba*,* which is however the *Benevente*; it rises in the *Serra do Pico*, not far from the sources of the *Muriahé*. The wide woods surrounding *Muribacca* are inhabited by roving *Puris*, who here, and at the distance of a day's journey hence, commit acts of hostility. They are considered, and not without probability, to be the same who live in a good understanding with the planters at *S. Fidelis*. They attacked last *August*, on the *Itapabuana*, the herds of the *fazenda*, and shot, maliciously, thirty head of cattle and a horse. A young negro-boy, who attended them was taken when separated from his armed companions, carried off, and, as it is here declared, killed, roasted, and devoured. It is supposed that they had cut off the arms, and the legs, and the flesh

* This river is marked in several maps by the name of *Compapuan*, and some of the inhabitants call it *Campapoana*, but its real name is as above.

from the body to take with them; for the fleshless trunk and head of the boy were afterwards found. The savages then betook themselves to the impenetrable woods. The roasted hands and feet were also recognized, bearing the marks of teeth. The *feitor* exposed to these injuries had conceived for them an indelible hatred, and declared that he should be happy to shoot even our *Puri*-boy. "It is incomprehensible, added he, that the government does not adopt more efficient measures for the extirpation of these beasts; for it is only necessary to go a little higher up the river and immediately come upon their dwellings." Their vicinity is undoubtedly very disagreeable, but it should be remembered that the planters by their early bad conduct to these people have themselves chiefly to blame. In the first period of settlement, avarice and the thirst of gold destroyed all feelings of humanity in the breasts of the Europeans; and they considered these naked brown men as mere beasts created for their service, as is proved by its having been proposed as a question for argument among the clergy of Spanish America—Whether savages ought to be deemed human beings like the Europeans? To prove that the *Puris* sometimes eat their fallen foes, much testimony is to be found in this country. Pater João assured us at *S. Fidelis*, that when he was travelling on the *Itapemirim*, he saw a murdered negro without arms or legs, around which a number of *Urubùs* was collected. It has been already observed, that the *Puris* would never confess that they eat human flesh, but, after the authentic proofs which have been adduced, their own confession cannot be brought into account. Even our *Puris* allowed that his kindred tribe place the head of a slain enemy upon a pole and dance round it. Even among the *Coroados* of *Minas Geraes*, it is customary, according to the declaration of M. Freyreiss, to put an arm or foot of the enemy into a pot with liquor which the guests then drink. Our stay at *Muribacca* was very productive of subjects for our collection of natural history. Notwithstanding the badness of the weather our hunters were very diligent and out at every favourable moment.

In the great woods and marshes of the *Itabapuana* the *Anas Moschata*, (*Linn.*) to us a new bird, builds its nest. This beautiful creature, of which the tame race is known in Europe by the name of the Turkey-duck, is distinguishable by the dark red, pimpled skin which surrounds the parts about the eyes and the bill; the entire plumage is black, diversified with green and purple; the shoulders of the wings are, in the old birds, of a snowy white, with the young ones, on the contrary, black. The old cock is very large and heavy, and has rather hard

flesh; the young, on the contrary, are very palatable, and therefore a welcome prey to the sportsman. We Europeans were far inferior to our half naked Indian hunters in overcoming the local obstructions of the grounds; and three of the slaves of the *fazenda*, whom, at their own request, we furnished with amunition, brought in every evening a great many animals which were then divided. Among these there were many herons, ibises, ducks, (*Anasmoschata and viduata*), the *Ipecutiri*, of (*Azara*,) or green-shouldered duck, the kingheron (*Gorça real*), a hitherto not fully described, but beautiful species, with a yellowish white body and a pretty blue bill,* and the large and small Egrette with their dazzling white feathers.

The *Itabapana* furnished us likewise with various curiosities. Messrs. Freyreiss and Sellow, on a walk up the river, were gratified with a view of a great company of otters (*Lutra brasiliensis*) *Lontras*, which, without the slightest shew of fear, played snorting and blowing about in the water. The Otter, of Brazils is chiefly distinguished from our European Otter by a somewhat flat compressed tail, which *Azara* also remarks, a character which is not however generally to be recognized in the stuffed specimens, and hence has been overlooked in works on natural history. Their skin is tender and handsome, and in the chief rivers, as in *Rio S. Francisco*, where they are called *Auranha* (*Aurannia*), they attain an immense size. We accidentally obtained one of these otters, which was floating dead on the water, though without any visible cause for its death, and still fresh enough to be added to our collection, and it measured from five to six feet in length.

The woods resounded with the drumming call of the Bear-ape (*Mycetes ursinus*), and with the gurgling voice of the *Saüssús* (*Callithrix personatus*, *Geoffroy*) which are here particularly numerous. Our huntsmen sometimes killed four or five of these handsome apes in a short time, by shooting swiftly in upon them whenever they saw a company of them together; and, while re-loading, some of the party endeavoured to keep the poor creatures in view as they fled over the boughs. The *Sauassu* has not yet been described in any work of natural history. It is prettily designed; the head and the fore-hands are black; the body is of a fallow white—grey brown; the long swaggy tail, of a yellow reddish cast. Many of these apes carried their young on their backs, and we found that they were easily reared and became very tame. Among the birds, we discovered an entirely new species of the wood-

* *Ardea trilecata* Latham, or Heron blanc a calotte noir Buffon—Sonini.

pecker which I call *Picus melanopterus*. All the plumage is white except the wings, back, and part of the tail, which are black, and the eye is surrounded by a bare orange-yellow skin.

The two huntsmen, whom we engaged at Campos, had been sent forward to the *Barra* of the *Itabapuana* to hunt for us there, and rejoin us at *Muribacca*; and, as the time assigned to them was long past, and they had our best arms in their possession, our anxiety lest they should abscond from us was not small. We manned a canoe, therefore, with our people in all secrecy; and these falling down the river to its conflux with the sea, surprised the unsuspecting huntsmen, took our arms from them, and dismissed them.

The journey northwards, from the *Itabapuana* required some foresight, as a tract of six or eight leagues to the river *Itapemirim* must be traversed where the Puris have always shewn themselves hostilely disposed. As they had consequently committed a number of frightful murders in this district, it was found necessary to establish here a military post, the *Quartel*, or *Destacamento das Barreiras*. The *feitor* of *Muribacca* resolved to conduct us himself to this post. We proceeded through the high natural forest, across a variable country open and sandy, and marked with frequent traces of the Antas (*Tapirus Americanus*), and the Deer; and reached, at last, near a high wooden cross, the firm sea shore, where we beheld a wide, extending, but gentle inlet, finishing at a great distance in a headland, and there it was, that on the elevated coast the *Quartel* appeared. We were well armed; twenty guns were ready to be discharged in case of attack, and many of our people had prepared cartridges for themselves, that they might load the more speedily. The soldiers of the *Destacamento* are accustomed to go forward to meet strangers, when they perceive, from a distance, a troop advancing on the white sand of the *Praya*; and thus we soon fell in with a patrol of six men, chiefly negroes and mulattoes, despatched to meet us by the officer, after we had marched along the coast for an hour. About noon the troop reached the *Quartel*, where the commanding officer (*Alferes*), received us very hospitably. This post consists of an officer and twenty soldiers from the militia. Two houses are here erected immediately over the sea, and some Mandioca and Millet-plantations been laid out, whence the soldiers gain their support. The coast here presents high perpendicular cliffs (*Barreiras*), on which the *Quartel* being built, it enjoys a fine prospect of the sea and of the coast, north and south, so that approaching, troops are visible from it at a great distance. On the land side a dark natural forest terminates directly at the dwellings

of the Palisadoes. At this place, two months before the present period, i. e. in August, the *Puris*, coming to plunder the plantations of the soldiers, ventured to engage with them having posted themselves behind the bushes. The result of this conflict, on the side of the soldiers, was the loss of one man and two dogs; but of the *Puris* three men were carried off, either dead or wounded, by their countrymen. Since then the post has been undisturbed, and the savages have not again shewn themselves on the coast. As trophies of this event, the collected arrows of the *Tapuyas* are preserved in the *Quartel*. The officer commanding here keeps always a guard of three men at the mouth of the river *Itabapuana*. This detachment remains there for an unlimited period, and had already been nearly a year, a truly melancholy station in such a wilderness, where even the food is bad, and the dwellings consist only of mud-huts covered with palm-leaves! The house of the officer is indeed commodious, and has several chambers; but the decayed roof is not sufficient to withstand the penetrating rain. The origin of the establishment of the *Quartel* was the murder of six settlers in the vicinity of this spot, lower down on the sea shore. Seven persons, having been at church, were returning from the *Itapemirim*, about six years ago, when they were attacked by the *Puris*, and five or six of them were butchered. One man only was fortunate enough to escape; a young girl endeavoured also to get away by instant flight, but she was overtaken and cruelly murdered. It was afterwards found that the arms and legs had been cut off from their bodies, as also the flesh from the trunks. Soon afterwards the *Puris* surprised a soldier and killed him. We received, at the *Quartel das Barreiras*, much interesting information from the commanding officer relative to the *Puris*. He assured us, among other things, that these savages actually wish to be allowed to live in peace with the Portuguese, which fully coincides with their desire expressed to M. Moraes at S. Fidelis. Such a pacification would be extremely advantageous to this coast; for, as the inhabitants are much scattered, they are constantly exposed to the cruel attacks of these insatiable barbarians, and the country is in danger of being depopulated, if other policy is not adopted. The savages appear as lords of these woods, now suddenly at one place, and then at another, and vanish again with equal rapidity, as was experienced in the attack at *Ciri*. They know all the recesses of the forests, are prudent and crafty, and intimately acquainted with the weak points of the Portuguese settlements; and many of them also understand a little of the language of the latter.

On the Sabbath day, held at *Barreiras*, the woods were explored, on which occasion the soldiers accompanied and guided us. Our entire booty was confined to some ducks, (*Anas viduata*,) and an interesting new bird,* belonging to the family of the *Cotingas*. Near the coast swam the great *Tartarugas*, (sea-tortoise,) which in the spring seeks the shore, and raises its round thick head slowly above the surface of the water. The night was accompanied by a violent storm, and the rain descended in torrents, from which the open roof of our abode hardly afforded us the means of sheltering ourselves.

From the negligence which prevails in keeping up this only road along the coast, and where neither bridges nor passable roads are formed, we made, on the following dull day, a very unpleasant journey, having run the hazard of losing our best mules in a place close to the huts of the *Quartel*. As we had still to proceed four leagues in the district disturbed by the *Puris*, we provided for a good close order of march, and advanced slowly under military protection, on a firm and even sand-flat, along the high ridges of the shore, which consist of yellow, or white and bay-coloured loam,† and of strata of iron-veined sand-stone. In the defiles and on the heights of the coast, the country is every where surrounded by thick woods, far into which no one dare to go on account of the savages: we, for our parts, had nothing to fear, though our people regarded with horror the place where the *Puris* had immolated their six victims. After the lapse of some hours we reached, on a low part of the coast, the *Povoacao Ciri*, which is now quite deserted.

The *Puris* made a sudden incursion here in August last, murdered in the first house three persons, and spread such a terror, that all the inhabitants immediately fled. Two houses only on the other side of a small *Lagoa* continue still occupied, and their armed inhabitants consider themselves safe. The savages, on the occasion alluded to, returned into the woods with the iron utensils and provisions which they found in the houses. After this attack, the *Serjent Major* of *Itapemirim* made an excursion with fifty armed men, into the woods to discover the *Puris*, and found a convenient path, broad enough for a horseman, which led to some of their habitations, and thence farther into the

* *Procrias Melanocephalus*, the head deep black, with one eye, the iris of which is vermillion-coloured; all the upper parts green-finch coloured; the under parts yellowish green, with dark stripes; eight inches seven lines long.

† According to the researches of Professor *Hausmann* of Gottingen, this fossil, which constitutes a principal material of the greater part of this coast of Brazils, belongs to the hardened *Steinmark*, with which it agrees in all its characteristics, and to which also the Saxon *Wunder-Erde* is referred,

forest, but he met with no Indians, and was obliged, for want of provisions, to turn back without success.

On the other side of the *Lagoa* in *Ciri*, near the above-named huts, our four soldiers took leave of us. We now proceeded from the sea and entered a fine wood, where here and there we encountered plantations. These places are, no doubt, subject to the depredations of the savages; but all the inhabitants are sufficiently armed. The wood became continually more beautiful; the high slender stems wove with their boughs a thick shade, so that the path, overgrown on all sides, appeared similar to a narrow harbour-walk. On the higher, dry boughs of the ancient lofty trees, we saw a great number of Falcons seated, watching for their prey, particularly the bad coloured (*Fulco Blumbeus*, Linn.) which is here very common. The white Milan, with the Fork-tailed Falcon (*Falco Furcatus*, Linn.) one of the most beautiful of the birds of prey belonging to the country, flew also in abundance over the wood.

We should have had excellent sport at the place but for the musquitoes, by which our hands and faces were immediately covered, while our mules and horses suffered exceedingly from the stinging-flies, (*Matuccas*.)^{*} We soon arrived at open meadow lands, where bogs and *Lagoas* swarmed with ducks, mews and herons. At noon we gained the river *Itapemirim*, on the south bank of which lies the *Villa de Itapemirim*. It is seven leagues distant from *Muribecca*,[†] a small and still new place, and has some good houses, but can only be styled a village. The inhabitants are partly poor planters, who have their establishments in the neighbourhood, and partly fishermen, with a few mechanics. The captain commandant, or commandant major of the district of *Itapemirim*, usually resides at his adjoining fazenda; in the town itself lives a serjeant major of the provincial militia. The river, in which some brigs lie, is narrow; but it allows some trade in the produce of the plantations, consisting of sugar, cotton, coffee, rice, and some maize and wood from the forest. A fall of rain in the mountains gave us an example of the dangerous and rapid floods which take place in the rivers of the Torrid Zone; for the stream, on a sudden, almost overflowed its banks; it is, however, always somewhat more considerable than the *Itabapwana*. The hills from which it flows are conspicuous at a distance by their remarkable, indented, conical summits; and are called *Serra de Itapemirim*. They are known on ac-

^{*} Southey writes improperly *Muluca*.

[†] *Lehre* mentions this country under the name of *Tapemiry*. See his *Travels*, p. 45.

count of the formerly established gold-works. *Minas de Castello* is situated near them, at about five days' journey up the river. But this country was so molested by the *Tapuyas*, that the few portuguese settlers residing there abandoned it about thirty years ago, and came down to the *Villa* and its neighbourhood. Up the stream, on the *Itapemirim*, still dwell the barbarous hordes of the *Tapuyas*, but particularly that of the *Puris*; and, as the *Mineiros* affirm, a yet wilder race, to which they give the name of *Maracas*. The massacre at *Ciri* is imputed by some to these last savages. Considerably down the river roam the *Botocudos*, the true tyrants of this solitude. It is related, that once, after loud shrieks and great clamour, proceeding from the neighbouring wood, had been heard, at a fazenda, situated on the river, some wounded *Puris* came there and sought protection of the Portuguese, informing them that the *Botocudos* had fallen upon them and killed a great number of their tribe. From all this it appears at least evident, that these woods are filled with hostile, independent savages. The *Tapuyas*, according to the current report on the *Itapemirim*, destroyed, about fifteen years ago, forty-three Portuguese settlers. Nevertheless, a way has been opened through this unsafe wilderness, extending from the *Minas de Castello* to the boundaries of the *Minas Geraes*, a distance of twenty-two leagues. The Capitan Mor of the district received us, on the production of our passports, very politely, and immediately supplied us in our dwelling with a number of the necessaries of life; as wood, water, and other requisites, for for which we returned him our personal thanks at his fazenda. This estate lies on the river, surrounded by fine meadows, where cattle of every description feed.

After a stay of some days we left this place. At a small distance from the town the river is crossed near its *embouchure*. In the swamps we found in great abundance the *Jatropha urens*, which affected the naked feet of our hunters more than the most pungent nettle; for the small prickles of these plants penetrate even through the clothes. In the low marshy lands, and on the river-banks of the whole coast, the beautiful blood-red *Tijé* (*Tnagara Brasilia*, Linn.) is very common; on the contrary, it is seldom found on the mountains and in the interior woods. At the mouth of the *Itapemirim* we found large flocks of a species of Mew, (*Larus*) and also Sea-swallows, (*Sterna*); Plovers, (*Charadrius*) and Sand-pipers, (*Tringa*) stocked the coast; on the sand of which the little night-swallows (*Caprimulgus*)*

* Probably the same bird which Vieillot calls *Caprimulgus Popetue*. See *Histoire naturelle des oiseaux de l'Amerique septentr.* Vol. I. Tab. 24.

also abound, and a larger sort are found in the paths of the woods. According to Marcraf, the Brazilians call this bird, in the country of Pernambuco, *Ibiyau*; on the coast which I travelled over they are, however, called *Bacuraú*.

From the intenseness of the heat we suffered much thirst, for which our young *Puri* taught us a remedy. It consisted in breaking out the stiff middle leaves of the *Bromelia* shrub, in the corners of which much good matter collects from the rain and dews; and catching this water by quickly applying the leaves to the mouth. We found, during the day, on the projecting promontories of the coast, stony hills, on which a vast number of wild palms were growing; the *Hæmatopus*, the Plover, and the Sand-piper were every where growing.

We took up our quarters for the night at the *Fazenda de Aga*, close to which extend great woods, filled with wild animals of every kind. A large Ounce, (*yaguarete felis onca*, Linn.) had the night before killed a mare belonging to the proprietor, and hunters were still out searching in vain for the predatory beast. The *Morro de Aga*, an isolated mountain, consisting of rocks with naked rugged sides, and surrounded with lofty hills, rises out of the neighbouring woods. I here for the first time heard with astonishment the frog called *ferreiro* (smith) by the Portuguese, from its voice being similar to the noise made by a copper or tin worker when he uses his hammer. Another object of natural curiosity was a thick bush of a hitherto unseen species of *Heliconia*, which always bends downwards the stalks of its flowers, at a certain height, and then raises them again with the point upwards; many flowers with scarlet-red sheaths cover the curving part of the stem; this magnificent plant forms a perfect arbour. The *Praya* contains here a few species of double-shelled muscles and snails.

Not far from *Agá* we reached the *Povoação Piúma*, or *Ipiúma*, inhabited by some Indian families, where a strong rivulet, only navigable for canoes, flows into the sea. There was also here a wooden bridge, provided against the swelling of the stream, 300 paces long; which is a rarity in this country. The banks of this rivulet are thickly overgrown, and the water, like that of the greatest part of the forest-streams and little rivers of this country, has a dark coffee-brown colour. There are found in the valleys at this place, and also on the dry heights, frequent thickets of a strong fan-reed, from sixteen to eighteen feet high, which bears on a somewhat compressed stalk a beautiful fan of long lancet-formed leaves entirely edged; these grow almost out of one point, and from the middle of them shoots a long smooth shaft, on which the flowers hang down from above like a banner. This fine species of reed is here called *Ubá*;

farther northward, on *Rio Grande de Belmonte*, it is named *Banna brava*; and the natives use it in the fabrication of their arrows. Such thickets often extend over whole districts. In a small pleasant vale we found a wood of magnificent shady trees, as the *Cecropia*, *Cocos*, *Melastomia*, among which flows the dark brown brook *Iri*, adorned with a picturesque bridge of the trunks of trees. Toucans, and the Maitacca, (*Psittacus menstruus*, Linn.) are here numerous. In the hollow of a tree we found also an immense bush-spider, (*Aranha Carangueheira*.) We rode next through a hilly country, diversified by woods and meadows, and arrived in the evening at the last height on the river *Benevente*; where we were suddenly enchanted with a beautiful prospect. At the foot of a hill on the northern bank stood *Villa Nova de Benevente*,—to the right appeared the light blue surface of the deep, and to the left the river *Benevente*, which spreads itself out like a sea, but all around is dark lofty wood, beyond which rocky mountains bound the horizon.

Villa Nova de Benevente was built on the river *Iritiba*, or properly *Reritigba*,* by the Jesuits, who collected here a multitude of converted Indians. Their church, and the monastery immediately connected with it, still exist: the last, where we had our residence, is made into the *Casa da Camara*. It stands on a rise above the Villa, and commands, particularly from the northern balcony, a grand view. The sun set in the ocean which lay before us, and changed its wide expanse into a sea of fire; the bell of the monastery tolled loudly to the *Ave Maria*, and every head was uncovered for evening prayer;—silence reigned in the extensive plains, and the voices of the tamus and other wild animals resounding across the river alone interrupted the stillness of the night. A number of pretty little brigs lay in the harbour, and led us to the false conclusion that no unimportant trade was carried on, but we were soon corrected. There is here very little traffic, and these ships had only sought shelter from the wind. The Jesuits had at first collected here 6000 Indians, and formed the most considerable *aldeia* on the coast; but of these the greater part, driven away by the severe regal services and by slavish treatment, dispersed themselves into other countries; so that at present the whole district of *Villa Nova*, including the Portuguese, does not contain more than eight hundred souls, of whom six hundred are Indians. But notwithstanding the diminution of inhabitants, the trade has since increased; for the exports twenty years ago

On *Faden's* maps the river is called *Iritibu*; on *Arrowsmith's*, *Iritiba*; but the villa is not marked on either.

did not amount here to more than 100,000 reis, (about 317 florins), and are now risen to 2000 cruzados, without calculating the exported sugar. The independent wild Indians, particularly the Goaytacases and the tribes of the Tapuyas, under which are comprehended the tribes of the Puris and Maracas, used formerly to harass this colony on the Iritiba very much; but the priest assured us, that these wild hordes had never again appeared, since the institution of an annual festival with processions and devotional exercises, celebrated on a certain day throughout all the district to the Holy Ghost. Villa Nova is itself a small place with some well built houses, but it became more lively on the Sunday, as all the inhabitants of the neighbouring country assembled to attend mass.

The commanding capitam (Captain) of the provincial militia in this district belongs to the regiment of *Espirito-Sancto*, whose chief, Colonel Falcão, is at Capitania. He came on Sunday to visit us, and had the politeness, in consequence of our inquiring about good hunters, to send some people acquainted with the nature of the grounds; and we found occasion, besides these, to engage a skilful Indian. These men procured us many interesting animals, and among the rest several *Saüassu*-apes, which cause their voice to be frequently heard here on the banks of the river. Two of our huntsmen found in the wood a large venemous serpent; it lay tranquilly in a deep hole where it could not be easily got; at one of the hunters therefore mounted up a low tree, and thence killed it. This handsome serpent, which is called in the country *Curucucu*, attains from eight to nine feet in length, and a considerable thickness, and has a yellow reddish colour, with a row of dark brown rhomboidal speckles on the back. The form, scales, and tail, shews that it is the great viper of the woods of *Cayenne* and *Surinam*, described, though rather incorrectly, by *Daudin*, under the name of *Lachesis*. * Its bite is much dreaded, and said to cause death in six hours.

From the *Iritiba* we next came to the river *Goaraparim*. Marshy meadows and morasses extend themselves almost to the sea, groves vary the scene, and noble forests sometimes delight the traveller. Here the sea, the hilly coast of which is covered with woods, is continually heard to roar.

At one place we reached a most beautiful little wood entirely consisting of *Airi-palms*.

* Marcgraf mentions this serpent under the name *Curucucu*; but in latter times, Counsellor Merrem, one of our most celebrated Reptiliologists, in the first book of the Annals of the Watterauon Society, for Natural History, has described and sketched an imperfect skin of this creature,

Strong young trees of this description rose on high with dark brown upright trunks surrounded by rings of prickles: their handsome feathered leaves screened the moist ground from the noontide burning sun; others of less age, and as yet without stems, composed the underwood, over which the decayed palms, withered and rotten, inclined like mutilated pillars. On these trees, thus falling into decay, the yellow-crested woodpecker (*Picus flavescens*, Linn.) or that beautiful species with red head and neck, (*Picus robustus* *) solitarily flapped its wings. The flowers of the fiery coloured *Heliconia* covered the lower shrubs, around which a fine creeper (*Convolvulus*) bearing the most superb azure blue bells, wound itself. The wood creeping plants presented themselves in this magnificent wood, in all their extraordinary windings and forms. Struck with wonder we admired the sublimity of this wilderness, which tucane, Pavos (*Pie a gorge ensanglantée*, Azara), Parrots and other birds alone animated. Our huntsmen shot in all directions of the way, and filled their bags with booty. On the other side of the wood we arrived at the *Povoação de Obú*, a few fishermen's huts at the distance of 2 leagues from *Villa Nova*. A *Povoação* (Village without a Church) named *Miaipé* lodged the *tropa* for the night. We had taken up our quarters in a highly situated house, where there were also other men, who regarded our *Puris* with astonishment, and observed all his motions. We were well received in this commodious abode, and had a large chamber, on the floor of which a clear fire was lighted, that soon dried our wet apparel. Not far from *Miaipé* lies the *Villa de Goaraparim*, whither a road leads crossing some rocky cliffs projecting into the sea. Near the *Villa* a narrow arm of the sea flows with salt water up the land, bearing the name of *Goaraparim*, and generally described as a river.

The *Villa* has 1600 inhabitants, the whole district about 3000; this place is a little larger therefore than *Villa Nova de Benevente*. The streets are not paved, except at the houses, and there badly; these small buildings have in general only one story. The place is on the whole poor, yet there are some considerable fazendas in the neighbourhood. One of these having 400 Negroes is called fazendas *de Campos*; and another with 200 Negroes *Engenho Velho*. On the death of the proprietor of the former, an universal disorder arose; the slaves revolted and ceased to work. A Priest informed the heir in Portugal of the state of his possession, and offered to restore

* This name was assigned by the naturalists at Berlin, after Azara described this bird in the 4th Vol. of his travels, p. 6. Where he calls it *Charpentier a huppe et cou rouge*.

order, provided an interest in the property were secured to him; the conditions were granted; but the ringleaders of the slaves murdered him in his bed, armed themselves and founded a republic of blacks in the woods, not easily to be molested. They used the fazenda for themselves, though they did not work much, but lived free and hunted in the forest. With the slaves of this fazenda, those of *Engenho Velho* also made themselves independent, and a company of soldiers could effect nothing against them. These negroes employ themselves much in seeking some superior productions of this wood, as the odoriferous Peruvian and *Copaiva Balsam* (*Oleo de Copauba*), and also another species. An incision is made in the tree, and on the discharge of the sap, the wound is covered with cotton, which imbibes the resin. There is a belief current in regard to these operations, that the tree must be cut at the full of the moon, and the sap collected at her wane. The negroes bring these products for sale in small wild cocoa-nut shells, the opening of which they close with wax. This balsam is so fine, that in the heat it escapes thro' the shell of the nut. More healing virtues are however ascribed to it in the country than it deserves.*

The wild negroes of both the fazendas receive strangers kindly, and shew themselves by their conduct to be very different from the runaway slaves in *Minas Geraës* and other places; who are there stiled from the villages (*Quilombos*) which they form in the woods, *Gayambolos*. These, especially in *Minas*, fall upon travellers, rob them, and often kill them; hence particular hunters are there employed with the name of *Capitães do mato*†, whose sole office is to go out and kill and take the blacks or *Gayambolos* in their lurking places.

The commanding officer of the militia at *Goaraparim* gave us a polite reception, and assigned a house to us for our night-quarters. We sailed in the morning past the *villa* along the river, flowing in a most picturesque direction between pale-green groves of *Mangue-trees*, (*Conocarpus*), bounded by woody, verdant heights, and having on its northern bank a fishing village. We then rode through large swamps filled with beautiful violet-blossomed *Rexea*-bushes, and over hills nobly adorned with *Airi* and other palms, the numerous varieties of which afforded endless occupation to our curiosity, till we arrived in the extensive *Uba* or Fanreed-grounds near the

* See *Murray apparatus medicaminum* Vol IV. p 52.

† In *Pernambuco* they are stiled *Capitães do Campo*. See *Koster's Travels* p 399.

Perro Cao, and crossed the little river by a wooden bridge. We now followed the course of the sea shore to *Ponta da Fruta*, where several dwellings, situated in a copse, presented the appearance of a scattered *Povoacao*. The inhabitants, colonists from Portugal, and negroes, received us well. They support themselves with difficulty by their plantations and fishing. Not far from *Ponta da Fruta*, on a distant mountain, is seen the monastery of *Nossa Senhora da Penha*, near *Villa do Espirito-Santo*, which lay about five leagues off. Woods, meadows, and groves, are interspersed with large marshes of reeds; where numerous white and other herons resort, and many new plants invite the stranger. On the grass of the sandy bank of a lake, I found, in great numbers, the *Cipo-serpent*,* which has its name from the slender, flexible nature of its form. It is of a dark olive-green, yellow on the under side, five or six feet long; and though perfectly harmless, the Brazilians, who hate all snakes, destroy it wherever they meet it. I found here the skeleton of an immense individual of this species in a corrupted state. At the little river *Jucú*, over which is a long ruinous bridge, we found on the sea a fishing village, rode through a beautiful primitive forest, and, finally, reached *Villa do Esperito-Santo*, on the river of the same name.

CHAPTER VII.

RESIDENCE IN THE CAPITANIA AND JOURNEY TO RIO DOCE.

Villa velha do Espiritò Santo, Cicade de Victoria,—Barra de Jucu—Araçatiba—Coroaba—Villa Nova de Almeida—Quartel do Riacho—Rio Doçe—Linhares—and the Botocudos inveterate enemies.

THE river *Espirito Santo*, which discharges itself into the sea with an impetuous force, hath its rise amongst the mountains on the confines of the Capitania of Minos Gerães, and winds itself in many meanderings through the vast primitive forests of *Tapuyas* downwards; on the borders of which

* *Coluber bicarinalus*: probably a new species chiefly distinguished by a row of keel-like scales on both sides of the back.

the *Puris* and *Botocudos* alternately range, and issue from the foot of those lofty mountains which stretch themselves out in a lengthened chain to the sea; amongst which the most conspicuous is the *Monte de Mestre Alvaro*.

On the summit of a high hill covered with trees in the immediate vicinity of the town is the celebrated monastery of *Nossa Senhora da Penha*, one of the richest in the Brazils, dependant on the Abbey of *St. Bento* in *Rio de Janeiro*, wherein is a miraculous image of the blessed virgin, heretofore resorted to by an immense concourse of pilgrims, although now only two priests are maintained there.

The town of *Espirito Santo* consists of mean, low, clay huts, unpaved and evidently falling into decay, since the building of *Villa de Victoria*, in a more pleasant situation about half a league higher on the north bank of the river a small, pretty, pleasant spot, which has latterly been much improved. The *Cidade de Nossa Senhora da Victoria* is a very neat, agreeable place, composed of respectable houses, built after the old Portuguese fashion, having balconies with wooden lattices before the windows. The streets are well paved, and there is an immensely large princely edifice, the Jesuit's convent, where the Governor resides, who has at his disposal a company of regular soldiers. Besides several monasteries, there are one church, four chapels, and a hospital. The city is nevertheless dull, and possesses few attractions to invite strangers to visit it from curiosity.

The coasting trade is however not inconsiderable, a number of *Lanchas*, Smacks and other vessels are constantly here, and *Frigates* and *Ships* of the greatest burthen can sail up to the town; the *Fazendas* in the neighbourhood produce a great quantity of Sugar, *Mandiocca* flour, Rice, abundance of *Bananas*, and other produce which are sent coastwise.

A number of forts defend the entrance of this magnificent river *Espirito Santo*, one of which is placed immediately at the mouth, a little higher up is a second battery, faced with stone, mounting eight pieces of iron ordnance; further on, between this and the town, situated on a hill is a third battery, mounted with seventeen or eighteen guns, besides others of smaller calibre,

The town is a pleasant and hilly spot, somewhat irregular but very agreeable, the river flowing past, and is on all sides enclosed with lofty mountains; in some places fields exposed to view, but frequently rugged, bare and over-run with the reed-cane and weeds. The brilliant mirror of the wide expanding river, is adorned with numerous verdant islands, whilst inland the eye is delighted in every direction wheresoever it roves.

Persons unaccustomed to the climate are sometimes subject to fever, which is attributed to the water of the place, but it may with equal propriety be ascribed to the quality of the food and influence of the atmosphere; the free use of *cinchona* and the fresh exhilarating sea breeze at Barra de Jucú speedily produce convalescence, and effect a cure. Barra de Jucú is a small fishing town, situate at the mouth of the small river Jucú, which falls here into the sea, passing by the considerable fazendas at Coroaba and Aracatiba. The houses of the fishermen are scattered about the town, in the middle of which is a swing bridge over the river, leading to the house of colonel Falcao, who has many fazendas in the vicinity, the most considerable of which is Aracatiba four leagues distant.

The woods afford good sport to those who are fond of the chase. A variety of animals are found in them, particularly a new delicate species of the *Gacchus Leucocephalus* of Geoffrey, which unite in small herds, and feed on nuts and a sort of wild cocoa palm; the porcupine; the *Couy* of Azara; and others. Amongst the birds, which are abundant in these extensive forests, is the superb blue *Nectarinea Cyanea*, (the *Certhia Cyanea* of Linnæus) and the various species of Manakin *Pipra Pareola*, the *Erythrocephala*, and *Leucocilla*; besides one, a non-descript which I denominated *Strigilata*,* a new beautiful kind of *Tangara*† and an exquisitely splendid species of the *Procnias Cyanotropa*,‡ whose feathers vary in colour as the light is changed in its inclination.

These small beautifully feathered Manakins may always be expected to be found on a certain tree, the blackberries of which they make their favorite nourishment, and delight to feed upon. Roe-bucks are also met with in great abundance, but in order to take with more facility such large and scarce animals which shun the neighbourhood of the towns, it is best to proceed two or three leagues farther up, in the wide spreading woods that border on the Fazenda of Aracatiba. The way is at first very agreeable, although in the beginning it lies through swampy loose sands with a great many water plants. The ascent is hilly, through thick brakes of young cocoa palms, and other lofty trees. A reedy grass covers the

* *Pipra Strigilata*, smaller than *Pipra Erythrocephala*, crown of the head, deep red, cody olive green, belly whitish, streaked with a redish brown.

† *Tanagra Elegans*, head bright yellow; back black, with yellow streaks; with shining greenish sky blue under the neck and breast; the sides and belly green.

‡ *Procnias Cyanotropus*, which when held against the light, the body seems wholly a splendid sky blue, if turned from it, then it appears a shining light green; the rump, chin, and throat black, the under part of its body white.—In the Berlin museum is one, called *Procnias Ventralis*.

open spots, in which the steel-glittering finch, the *fringilla nitens* of Linnæus, shows itself in great abundance; an in-offensive large snake of the genus *Coluber*, which the natives know by the name of *Caninana*, is frequently to be met with, and which is faithfully described in Merrem's Natural History of amphibious Animals.

The great forest of *Araçatiba* presents a frightful wilderness, resounding with the screaming of parrots, and the noise of the *Sauassu* apes. Cipos and other strikingly peculiar kinds of shrubs interweave their giant-like stems in this impervious thicket; the splendid flowers of the reed cane, the down hanging tendrils, and the tree-embracing fern shrub all flourish here in luxuriant growth; and every where in moist places the young cocoa palms adorn the underwood, while here and there the *Cecropia peltata* exhibits its silver-grey slender stem. After pervading this deep embowering gloom so long, the light suddenly burst upon us, and we were most agreeably surprised to find ourselves at the foot of the lofty Morro de Araçatiba, with thick forests, on one side, waving their heads on towering rocks on another side. The eye is relieved from the effects of the broad glare by pleasant verdant plains, whilst in the distance are descried the two small turrets which decorate the seat of the fazenda de Araçatiba. This estate employs four hundred negro slaves; in the neighbourhood are two thriving plantations, particularly of sugar-canes. It is the most considerable fazenda we have observed in our whole journey; the building has an extensive façade two stories high, and a church; the negro-huts, with the sugar-works and buildings for the husbandmen, lie at a small distance from the house, at the foot of a hill. Somewhat about a league hence, in a wild uncultivated spot encircled with a forest towards the river Jucú, is a second fazenda called Coroaba, belonging to another proprietor. The government has at St. Agostinho about forty families, which have come to settle here from the islands of Terceira, St. Michael, and some few from Fayal. These people live here in the greatest poverty, and complain bitterly that they had been most cruelly deceived by specious promises, none of which had been fulfilled.

Gladly would we have remained at Coroaba, but the impossibility to accommodate so large a party, made it necessary for the present, to stop at Barra de Jucú. We had also a very important object in view, which we expected at Capitania (so is the district of Espírito Santo commonly called for brevity) viz. to send to Caravellas in order that our travelling companions might not be put to any inconvenience; to prevent which, M. Freyreiss and myself determined immediately to

undertake the journey to Caravellas, that we might there regulate our affairs.

Our journey was quickly arranged; and a small well armed party accompanying us, we quitted Barra de Jucú, and that part of our troop which we left behind, returned to their occupations at Coroaba. We arrived at Pedra d'Agoa, standing on a hill by the side of the river, in order to be conveyed over the Espirito Santo with our two saddle and four pack-horses. At this place we observed on the other side of the ridge of mountains, a very remarkable rock, the *Jucutucoara*, not far distant from villa de Victoria. This immense block of stone is covered with pale green hillocks, some of which are clothed with small shrubs, and resembles very much the celebrated Dent de Jaman, in the Pays de Vaud. Fronting this, near the river, lives the friendly Fazenda, Rumao, facing whose house is the Pigeon island, (Ilha des Pombas) in the middle of the river. The view of the heights from this side of the river, whence *lanchas* and fishermen's canoes sail, is delightful.

The following morning our canoes made their appearance, and conducted us over the river, one thousand paces broad at this part. Our way was through a valley which ran in various directions, and led immediately amongst the mountains, of which *Jucutucoara* forms one of the most important. Near to this is a pretty white house, a fazenda belonging to a M. Pinto. We passed the small river Muruim, over which there is a wooden bridge, and then after we had rode through some swamps we reached the sea coast. Upon turning the eye the extensive chain of mountains of Espirito Santo is distinctly seen, but as soon as we come to that part betwixt the first distant high mountains, they are no longer visible. Three leagues distant from Capitania, we took up our quarters for the night in the small village of Praya Molle.

There are several houses scattered about in this place, the inhabitants of which are very fond of music and dancing; one played the (*violas*) guittar, and the young people danced the *Baduca*, in which the body undergoes various contorsions, beating the time with their hands, and snapping two fingers of each hand alternately, in the manner of the Spanish castanets. Although the taste for dancing and music is general throughout these parts, yet they evince no disposition for the pleasures of the table, at least in most places. From Praya Molle, we arrived the following morning at the village of Carapebucú; all the way from this place, the forests extended forwards to the sea, crowning every bay, and ornamenting every point of land with waving verdure.—Already invited by the warmth of the approaching summer, these woods abounded with

butterflies, particularly the *Nymphales*. Here too we found the curious purse-formed nest, of a small bird of the genus *Todus*, or flat-bill, which is constantly to be found near a peculiar kind of wasp's nest (*marimbondo*,) which, as the natives assert, is to secure itself from the attacks of its enemies. I had an inclination to approach this bird's nest, but the wasps showed themselves so effectually, as to compel me to retreat.

In the thickets along the coast, a great number of wretched families reside, subsisting on the produce of their little plantations and fishing; they are principally Negroes, Mulattoes and other people of colour, with but few whites among them; they complain of their distress and poverty in such pitiable tones, that their prayers are most commonly productive of the desired effect. Hence, northwards, we found no more Creoles or Mulattoes, only Indians drawn together in a state of civilization, whose lonely habitations lay scattered up and down in a rich shady wood of superb lofty trees. Obscure intricate winding paths led from hut to hut; in the clear chrysal waters of the brooks, we beheld the naked youths in all the simplicity of nature, with their dark brown skins and coal black hair sporting in the stream; objects like these united with the stillness of the scene, carry the mind back to that primæval state of happiness and bliss from which mankind have fallen.

In this forest ramble we met with beautiful birds; the gold-green *Jacamar* (*Galbula magna*) perched on slender twigs, on the watch for insects; and we heard unknown notes in this lonely wood. After we had travelled about four leagues, we issued from the wood and discerned right before us upon a height across the gulph, the Villa Nova de Almeida.

Villa Nova is a large Aldea of civilized Indians. Here is a large stone built church belonging to the Jesuits who reckon within a circle of about nine leagues, about 1200 souls; the greater part of the inhabitants of Villa Nova are Indians, but there are some Portuguese and Negroes. In the library of the Jesuits there are some very ancient manuscripts of the order, but the superiors have seldom felt any esteem for its contents and have destroyed or dissipated this treasury of knowledge, in a scandalous manner.

The Jesuits taught here in former times the *Lingoa geral*, and their chapel of Dos Reis Magos was very magnificent; the district is but thinly inhabited and poverty reigns here in splendid misery. The Indians bring food for their subsistence which consists of Maize and Mandioca on their horses, and expose sometimes wood and earthenware which, with their fishery in the sea and in the river Saüanha or Dos Reis Magos that flows by the Villa, is altogether not inconsiderable. Sellow, who

came lately to this place, found great advantage in the peculiar method of catching fish with the twigs of the *Tingi*-tree, which the great Condamine, has shewn to be the practice on the river Amazon, it is as follows: they cut off twigs from the *Tingi*-tree, split them at the end, bind them in bundles and whirl them in the water, particularly where the water has a slight fall; in the mean time, these make a sort of hedge across the same and thus the fish collected to that spot are easily taken, for they become stupified and driven over to the other side, die, or are so stunned as to be taken up with the hands. The plant with which this violent operation is performed, is a sort of Genus *Paullinia*, and *Jacquinia obovata* (a shrub with red berries and inverted oval leaves;) they grow in the bushes on the coast and are named from their productions, *Tinguy da Praya*. They mentioned here that a sea-monster, never before seen, had been lately killed by an Indian. It had feet which resembled the human hand, was very large, and a quantity of oil was drawn from it; the head and hands were sent to the Governor of Capitania.

All our endeavours to procure more accurate information concerning this animal were fruitless, for the very skeleton had been destroyed; it appeared however, from the account, that it was the *Phoca* or *Manati* species.

The wood through which the Saüanha flows, is called in the ancient Indian dialect *Apyapqtang*, in which the Coroados and Puris dwell; we were also told that another tribe the Xipotes dwell higher up betwixt the Rio Doce and the Saüanha, but the information received from persons residing only in the towns of these different tribes is very unsatisfactory and not to be depended upon.

From Saüanha forwards to Mucuri the sea coast is nearly bare of Indian families, their speech is throughout Portuguese, and they have laid by their bows and arrows for the musquet. Their dwellings also differ but little from the Portuguese settlers, and their chief employment is fishing and cultivating their plantations.

A few miles northward lies the great fishing river Pyrakä-assu at the Barra (or mouth) of which is a small Povoação, of a few houses, called Aldea Velha; further on is a considerable village of the Jesuits, who at present have a numerous assemblage of Indians under their government. Their principal subsistence is on fish and mussels, and at present there is on the other side of the river an immense heap of mussel-shells lying together; this eating of shell-fish is supposed by many authors to have been the custom of the ancient inhabitants. We arrived at Aldea Velha in the cool of the evening;

six or seven straw huts with only one decent house form the whole of this place. The house belongs to the commandant of the district, a lieutenant of a regiment in the garrison of Espirito Santo. This station was considered as a sort of banishment by the officer who had resided here some years, and who complained bitterly of the want of provisions and of every thing to make life agreeable, almost the only food to be obtained being the flour of Mandioca and fish. The passage hence is dangerous, and our crazy canoe could scarcely be kept from foundering. We noticed flights of cross-bills (*Rhynchops Nigra*). On the further side of the river, the plantations of the Indians lie scattered about: their husbandry produces chiefly Maize, Mandioca and Baga (*Ricinus*) from which oil is obtained.

Landing here, we took another ramble in the forest, where, amongst a variety of flowers, swarmed the most beautiful butterflies; we also met with a sort of wild pheasant, which is an extremely shy bird and difficult to be taken; it is called *Jucupemba* (*Penelope Marail*) of Linnæus.

Returning to the coast, we proceeded about four leagues further, and took up our quarters for the night at Quartel do Riacho. We found here various kinds of *Fucus*, or sea tongue, which are thrown up by the waves, and but few *Conchilia*. On a cluster of rocks in the sea, the steel-blue shining swallow (*Hirundo violacea*) had built his nest. On the coast lie, wide from each other and scattered among the bushes, the solitary habitations of the Indians, some of whom venture far out at sea in their canoes, to procure fish. Quartel do Riacho is a military station, having an inferior officer and six soldiers for the purpose of sending forward the orders of government and connecting the post with Rio Doce. The officer here was an intelligent man who gave an interesting account of the war in the woods of Rio Doce with the hostile tribe of the Botocudos, we were also informed that we now were near the borders of the wilderness where this people dwelt.

These savages, whose warlike spirit keeps the Portuguese in continual alarm, have the character of being anthropophagi, or man-eaters. And besides this horrid practice they are extremely treacherous, for whenever they enter any place with apparently peaceful dispositions, they soon throw off the mask and display their hostile intentions, so that no good understanding can long subsist with them. Seven leagues and upwards on the Rio Doce, for some years back, on the spot where the Povoação de Linhares is built, was a military post (*Destacamento*) with seven soldiers, and provided with some cannon for the protection of the road to Minas. The savages at the first were driven back effectually, but becoming more and

more acquainted with Europeans and their arms, they presently lost all dread.

The lately deceased minister of state, the Conde de Linhares, in consequence of this event formally declared war against them, and under his orders there were erected several military posts, and others were strengthened for the protection of European settlers, and the intercourse with Minas, by way of the river. Since then, the Botocudos have not made their appearance, except children, the whole race, even the aged, being rooted out. This extirpation was conducted with much cruelty, from a belief that whenever an enemy had fallen into their hands, he had been killed and devoured. Notwithstanding a peace was concluded and that the Portuguese showed every where their friendly disposition, yet many were slain by their formidable arrows, so that not the least spark of good faith was looked for in these wild people, who, on every occasion, glut their revenge.

By the laudable and philanthropic exertions of the Conde des Arcos, the Botocudos in the Rio grande de Belmonte who had held out, were conciliated to terms of peace. In this he so well succeeded, that the traveller in passing through this seat of war to the Rio Doce, in the neighbourhood of Rio Grande de Belmonte, finds perfect security. We set out early in the morning, accompanied by two soldiers, from the Quartel do Riacho, and crossed the Riacho (brook) from which the Quartel has its name. The road lay for eight leagues through a deep sand, in the glowing heat of December. The country is covered with the dwarf cocoa-palm; on passing the heights not far from Praya is the Quartel de Comboyos where three soldiers are stationed for keeping up the communication. Here we noticed traces remaining of the large turtles which creep out from the sea to land, and lay their eggs in grooves scratched in the sand. In many places lay parts of the skeleton of this animal, and we were astonished at the hugeness of its skull; one we found weighed above three pounds. The Indians prize the flesh of this animal and collect a good quantity of fat from it; they are also fond of its eggs, of which from twelve to sixteen dozen are found in a single groove covered over with care. These eggs are round (white) with a leather-like covering, and contain a clear watery albumen and a fine deep yellow yolk; they have, however, a fishy taste. We were here much distressed for water to assuage the burning thirst of our cattle; in every part, the ground was so hot that we could find but little refreshment, until relieved by the experience of our young Indian. He took some casks into the bushes and quickly col-

lected water, from the leaves of the bromelia. This water is not like new-fallen rain, pure and clean, but black and foul; we found in it also the spawn of frogs and young frogs. We strained it through a cloth, then mixed it with brandy, lemon-juice, and sugar, and so drank it, which gave us a most delicious refreshment. We frequently found in the shrub bromelia small yellowish-green frogs, also a nondescript *hyla lateola*, of a pale yellowish colour with a black streak across its eye.

We now proceeded on our journey in a fine moon-light night, and in an open place, wholly bare of wood, found ourselves near the mouth of Rio Doçe. We arrived fatigued at the Quartel de Regencia, a military station of five soldiers, to convey travellers over the river and to hold communication with the village of Linhares. We passed the night in a tolerably roomy house with the soldiers, and noticed that in many of the rooms were wooden clubs and a troneo.* The people here live miserably, having nothing but fish, mandioca flour, black beans, and sometimes salt meat; they are of all colours, Creoles, Indians, Mamelukes, and Mulattos. By break of day, on the following morning, we went to satisfy our curiosity with a view of the Rio Doçe. That important river (betwixt the Rio de Janeiro and Bahia) stately and majestically rolls its stream down to the sea. Rio Doçe has its rise in the Capitania of Minas Geraes, whence, by the uniting of the Rio Peranga with the Riberao de Carmo it has the name of Rio Doçe, or two rivers. It flows through a considerable flat, open country, and forms a great number of cataracts, whereof three succeed each other, which are called Escadinhas. In the woods, which clothe the banks of this mighty river, abundance of various animals are found; the *Capicus Americanus*, two species of wild hogs, (*Dicotyles* of Curier,) the *Pecari*, or *Cayottu*, and the *Porco a Quechada branca* (*tayetita* and *tagnicati* of Azara) two kinds of deer, (the *guazupita* and *guazubira* of Azara,) above seven species of the cat kind, among which the speckled ounce and the black tiger are the largest and most fierce. Equally as terrific as these beasts of prey and the horrors of this impenetrable wood, is the living inhabitant, the rude, wild Botocudo. For some time past a *picade*, or wood path of great length on the south side of this forest has been opened, although not yet finished; these woods now with proper arms may be passed in security.

* The troneo is a punishment for soldiers; it consists of a long board placed on edge, in which a row of round holes are cut, through which the head of the delinquent is thrust. The board incloses the neck, in which the man lies in an horizontal position, stretched out on the earth.

Linhares, directed his attention particularly to this fruitful pleasant spot; he placed new military posts, and built, about seven or eight leagues up the river, the village which properly after him was named Linhares. To this place deserters and other criminals are sent for punishment and to people this new colony.

We now set out with impatience to make an excursion on the magnificent Rio Doce, and as far as possible, take a view of the theatre of that extirminating war which drove out the Botocudos. The day was warm and calm, and on the 26th of December we went on board, by break of day, in a canoe, accompanied by six soldiers who rowed the bark, being in all nine persons well armed. On the weather-side of the river, where the current is strongest, sand banks appear, which require much caution to avoid; we came safely, though late in the evening, to Linhares. Again by sun-rise we took our departure; the day was fine, and by the aid of the soldiers, who frequently had made the voyage, we found it very agreeable; we did not see a house all along the coast. A great number of large and picturesque islands broke through the surface of the river, crowned with luxurious green and waving woods, some of which had particular names, which will be enumerated hereafter. At high tide the Rio Doce has a yellow disturbed water, which, according to the general opinion, generates the fever of that name.

Abundance of fish is found herein, especially the saw-fish (*pristis serra*) which comes up to Linhares, and to the Lagoa do Jurapanam, where they are taken in large quantities. The woods resound with the chattering of wild apes, especially the Barbados *Myctes Ursinus*,) the *Sauassus* (*Callithrix personatus* of Geoffroy,) one of the most splendid ornaments of the Brazil woods; the Arara, (*Psittacus Macao*, of Linnæus,) or Macau, called in Europe Aras, which was so wild as not to come nigh us; yet we heard his raven screams, and on the stately crown of the high Sapucaya-tree, this magnificent bird can be distinctly seen. Its long tail can be descried from far, with his burning red feathers shining indescribably splendid in the brilliant rays of a noon-tide sun.

Paroquets, Maracanas, Maitaccas, Tiribas, Curicas, Camutangas, Mandayas, and other kinds of parrots in swarms, filled the air with their loud screams echoing from shore to shore. The large stately *Anas moschata* of Linnæus, Corroas, and the Cross-bill, (*Rhynchops nigra*,) the Toucan and the Curucua, (*Trogon viridis*,) united their loud cries to the stunning clatter, making the woods resound. Few settlers are found on the banks of this river, which appeared destitute of wild animals,

and of the still more savage Botocudos. Some, however, now and then made their appearance among the private recesses of the river, as they from time to time rambled to its banks. Towards noon we came to *Carapuca*, (or Cap,) a small island; our tired people finding it impossible to reach Linhares, determined to make for some narrow creek, which we soon found, situated out of the current of the rapid stream; on an island of which we found abundance of the lofty Fan-cane, (*Uba*) of the leaves whereof the Botocudos fledge their arrows. Our soldiers advised us to remove to some other island on the approach of night, and for safety, chose the *Ilha Comprida*, (Long Island;) but finding this not so secure from the visits of the natives, we removed to the *Ilha do Gambin*, where the governor usually took up his abode for the night, when he went to visit the colony of Rio Doce. We found the bushes on shore so thick that we had to clear away the land before we could find a spot to set foot upon. Here we saw the great Owl, (*Curuja*), and the *Anas moschata*; we were much troubled with musquitos in the night.

By dawn of day we left this island and made for the north bank of the river, in a narrow channel, between the *Ilha Comprida* and the main land, where the stream was less rapid. Here we noticed the *Cocos Palmita*, called in other parts *Jissara* with its slender shanks and finely feathered shining green crown, decorating the woods; also, a variety of beautiful flowers new to us, and among them a *Convolvulus* with large white flowers, and a bean-bearing plant of the class *Diadelphia*, with bright yellow flowers so large, that they appeared like garlands hanging on the bushes.

We passed by many other islands where the people of Linhares had plantations. In these islands there is security from the visits of the Indians who have no canoes, and therefore cannot cross over where the river is rather broad and deep. At the *Ilha do Boi*, (Oxen Island,) reside the *Guarda Mor*, and at *Ilha do Bom Jesus*, the religious of Linhares. About noon we discovered Linhares, and landed, after much labour; we went to the house of *Senhor Cardoso da Rosa*, who commands the post from hence to Rio Doce. Soon after we were conducted to the *Fazenda Bom Jardim*, whither we were rowed, with the swiftness of an arrow, by the negroes belonging thereto, and were hospitably entertained at the house of the owner *Joao Felipe Calmon*, where we found a cheerful party; and left this fazenda at day-break on the 28th of December, highly gratified with their civilities and attention.

Linhares is, as yet, but an insignificant, poor settlement; the houses are low and mean, roofed with the leaves of the

Coco or Uricana, built of clay, unplastered, and small. It is built in the form of a square; there is no church yet, but a large cross, of wood, made by cutting off the branches and lopping a huge *Sapucaya*-tree, and fastening a piece of timber athwart. Mass is said in a small house.

The inhabitants have their plantations partly in the islands of the river and partly in the vicinity of the town: on the borders of the wood the *Tenente* Calmon is the only one who has a fazenda with a sugar Engenho or mill. When they first obtained possession of this spot where Linhares now stands, they came over with thirty or forty armed people, and went to drive away a body of Botocudos who had collected together, but who presently fled and left the spot to the invaders. Some of the natives had fallen in the attack, but the new-comers soon found that a hundred and fifty stout archers were not so soon to be expelled; they therefore went another way to work, and, by stratagem, at length drove them entirely out: since that time, now about three years, they have had possession and they have not been any more molested. There are in the woods a variety of trees fit for timber, among others, the *Peroba*, excellent for ship-building. To protect the settlers from insult, they have a Quartel, or detachment of military, which has penetrated into the interior of these immense woods, and thereby affords more secure possession. It was, however, found necessary to provide the soldiers with a sort of armour (*Gibao d'Armas*) to protect them from the arrows of the Indians. It is made of cotton cloth, with many layers of cotton-wool wadded in and well closed. It is wide, and with high collar to protect the neck, short at the arm, but so as to cover the outer part, and reaches as low as the knee; but it is found to be too heavy and troublesome, and not altogether secure, although it was supposed at first capable of resisting a musket-shot. In Capitania and some other places, these *Gibao d'Armas* are made of silk, which are lighter but more expensive. A trial was made by a strong Botocude shooting an arrow at a soldier clothed with this armour with consent; the arrow struck him in the side, but though it rebounded, gave the man a severe shock.

From the fazenda of Bomjardim is a new road to the Quartel do Riacho by the Lagoa dos Indios, near which is a second detachment called the Quartel d'Aquiar, where several Indian families reside, and eight Indian soldiers in the service. From Linhares, in the woods is the Quartel segundo do Linhares with twenty-three soldiers; and on the south side of the Rio Doce is the Quartel d'Anadya with twelve soldiers; and further on that of Porto do Souza, which maintains twenty

men. At Linhares are eight Gibao d'Armas, at Souza four, and at Anayada one, which must always be the first to meet an attack. The post-master of Linhares has a heavy service; he must every month travel the whole district, let the weather be as it may, a distance of ninety leagues. There are at present residing in Linhares an ensign, one surgeon, and one priest; the rest are principally soldiers. This colony appears to be very hardly and uncomfortably treated: whoever is inclined to travel must first obtain leave; and no family dare consume more than one bottle of brandy a month, nor of any other spirits. A colony so managed must soon meet its end, if not better supported; an event, which before the finishing of these travels may have to be recorded.

My residence at Rio Doce was one of the most interesting objects of my journey; for, superadded to the most sublime scenes which Nature has produced, is an abundant variety of the most curious subjects in natural history, finding full employment for the most inquisitive in that branch of science, as well from their beautiful varieties as from their manifold species. Richer prospects the traveller can no where find than in this journey, amongst which is the Lagoa de Juraparanan, a great lake, not from Linhares; this is not found in Arrow-smith's map, although it is in Faden's, but not in a correct situation. The name comes from the word Parana, which in the Lingoa geral means *great water*.

Vasconcellos, in the year 1662, mentions the tribes of the Tapuyas on the Rio Doce: also Aymores, (Botocudos) Puris, and Patachos; and, though the first apparently ruled these regions, the other tribes wandered to these parts. The same author notes, that some of the Amores, or Botocudos, were nearly as light in complexion as the Portuguese. The war, which raged with so much ferocity at Rio Doce against the Botocudos, rendered it impossible for us to learn more of these remarkable people; for on the approach of an European the alarm is given, and the stroke of an arrow is a sure result of his temerity. Higher up, on the Rio Grande de Belmonte they live peaceably with the inhabitants, and strangers may lodge there in security. I shall therefore reserve all further remarks of this primitive race, to the account of my residence there.

To those fond of field sports the residence at Linhares will be very agreeable. With the feathers of the parrots the Indians fledge their arrows, and their quills serve to make excellent pens, or ornament the heads of the savages.

By practice, the soldiers of Linhares are very expert in following game in the woods; but the Botocudos are far supe-

rior; it therefore requires the greatest precaution to avoid distant pursuits in the woods and encounters with them. In general the Mineiros, or inhabitants of Minas Geraes, are by far the best wild-hunters, as they are a stouter race of people, and by their wars in the woods, and with this mode of obtaining subsistence, are more experienced. We were presented with the arms and ornaments of a Botocudos; they procured us also a young child of the race, whose mother had been killed in a fight with them. Having accomplished the object of our journey to Linhares, we took leave of the place, in order to proceed further to the north side of the coast. We departed in a convenient large canoe which the Senhor Tenante Calmon lent us.

On arriving at the Ilha do Boi, we paid a visit to the Guarda Mor, who has a good plantation of Milio and Mandioca. We presently learnt that he is a Mineiro, a people who live more on Milio than Mandioca, a characteristic of the inhabitants of that province. In order to reduce the Milio to flour, a maize stamp is used called a (*Preguisa*) or *sloth*. Our comfortable canoe, supplied with an awning, and stored with abundance of provision, brought us in four hours to the Barra, or mouth of Rio Doce downwards, near Regencia, a passage that had taken us a day and a half to make upwards.

CHAP. VIII.

JOURNEY FROM RIO DOCE TO CARAVELLAS, TO THE RIVER ALCOBACA, AND AFTERWARDS TO MORRO D'ARARA, AND BACK TO MUCURI.

Quartel du Juparanan da Praya—River and Barra of St. Matthew—Mucuri—Villa Vicosá—Caravellas Ponte de Gentoo—the River Alcobaca—and Residence at the same.

AFTER passing the night with our friends at the Quartel du Regencia, with much trouble, we conveyed our pack-horses over the river. We followed them soon after, and rode in the afternoon, accompanied by our two friends, from Linhares, two leagues over the deserts and coast, on to the Quartel de Monserra, or de Juparanan da Praya, where seven soldiers are stationed. Close by, is a narrow long lake, called Lagoda de

Japaranan da Praya, very inferior to that at Linhares. The military have some plantations in the vicinity, which produce mandioca, maize, and fine water-melons (*Melancias*); they also add to their support by fishing and hunting. We here found an old man, named Simon, who had resided many years in perfect seclusion in a small house near this Quartel, and who had not the smallest dread of the savages. He cultivated his plantations himself, is an expert huntsman and fisher, and well acquainted with the surrounding country: we visited him in his hermitage, and found him not only well satisfied with his situation from his circumscribed wants, but also so good-humoured and jolly that his cheerfulness made his acquaintance desirable. He gave us the skin of the great ant-bear, (*Myrmecophaga Jubata* of Linn.) called here Tamandua Cavallo, which he had lately killed. At Monserra we procured a variety of natural curiosities; and amongst others the *Scarabeus Hercules*, the largest beetle of the Brazils, which a soldier had caught and brought to us alive. Soon after, four or five heads of this rare beetle were brought, and, upon my complaining of the mangling of this interesting rarity, I was told that the ladies in many places wore these heads round their necks as ornaments. After taking leave of our two fellow-travellers from Linhares, we proceeded six or seven leagues further on this uniform sea-coast, our two soldiers, a negro and an Indian, stopt frequently to collect some beautiful plants which grew on the sands, with which they filled their knapsacks. The whole territory from Rio Doce to San Matthæus, is a desolate waste, in most parts destitute of water. To obtain this indispensable requisite of life, the best, and, indeed, only certain method, is to provide an intelligent guide; but neither of our soldiers had made this journey. We missed the first watering-place, *Cacimba da S. Jaod*, the second, however, named *Piranga*, which we arrived at about noon, afforded us refreshment. While collecting drift-wood on the strand, we perceived at a small distance a huge turtle, the *Testudo Mydas* of Linnæus, which seemed anxious to lay her eggs. Our presence did not interrupt it; the animal evinced no other signs of fear at our presence than by a hiss similar to that of a goose. We could even take it up, but its weight required four men to lift up. It then began to work with its hindmost fins, and soon formed a round hole in the bed of sand; and immediately began to deposit its eggs. One of our soldiers laid down at his whole length on the ground, and with his hand pulled out the eggs continually; by this means we collected in about ten minutes 100 eggs.

As the great weight of the turtle alone would be as much as

a good stout pack-horse could carry, besides the difficulty of placing the cumbrous mass in a way to be conveyed thence, we resolved to spare its life and to be satisfied with its ample tribute of eggs.

The Testudo Mydas, the Coriacea, as also the Caretta, or Cauänne, lay their eggs in the warm months of the year in those parts between Riacho and Mucuri. They climb up to the land at the approach of evening, scrape a hole, lay their eggs therein, fill it up again with the sand, stamp it down tight, then, in an hour or two after sun-set, hasten back again to the sea.

This turtle which had so abundantly provided for us, made its appearance no more: after some hours, on returning to the strand, it had stopped up the hole completely and left its broad track in the sand, as a token that it had crawled back again to its element. One of these turtles can furnish a good meal to a large company, with its eggs. The *Midas* turtle will generally lay ten to twelve dozen of eggs; the *tender-shell* lays from eighteen to twenty dozen at one time; these eggs are extremely nutritious, and are much sought in unfrequented coasts by the Indians, and by the whites in the vicinity of the colonies. Our supper being ended, we made a fire amongst the bushes of the dwarf-palm, to keep off the wild beasts from our cattle. In the morning we found fresh traces of the great wild cat. According to the information of old Simon, the black tiger, or the black ounce, (*Felis Brasiliensis*) the Yaguartnoir of Azara, are often seen in these parts at night in search of prey.

On the first of January, which in our country is certain to be attended with snow and ice, we were here saluted at seven o'clock in the morning with warm sun-beams, and at noon were oppressed by an intolerable heat. We found ourselves after an hour's ride at Barra Seca, the place where a lagoon discharges itself into the sea, and close to the spot where the foregoing evening we were so dreadfully distressed for water. This water is at times so completely dried up that it may be passed on foot; but at this time it was so high that we were compelled to remain some time before we could get over. The loaded beasts were therefore led further up, where the negroes and Indians sometimes concealed themselves. Here we found the ruins of a hut which had formerly been a Quartel or military station, and in its vicinity plenty of good water. We found here a large campos, an open place much sought for by cattle, and ranches, or Indian huts, made of palm-leaves. We also found a spring of excellent water, which to us at this moment was an inestimable treasure.

We discovered at the coast the following evening the traces

of wild beasts on the sand, and in a waste the *Remirea littoralis*, a sort of grass: at the approach of night we erected a large hut made of cocoa-tree leaves, and hoped to pass the night in repose, but the multitude of musquitos, which tormented us excessively, rendered it impossible to sleep; a tremendous tempest raged at the same time, and we found ourselves destitute of water, and scarcely any thing left to eat. To our mortification also, next morning we had to seek our beasts which had strayed back to the place where we had so very opportunely discovered the spring of water, by which we lost half a day before we could bring them back. At evening we arrived at *S. Matthæus*, an inconsiderable river, the banks of which were most agreeably ornamented by *Conocarpus* and *Avicennia* bushes; on the north side lay the *Povoação*, which is called *Barra de S. Matthæus*, consisting of about twenty-five houses; the river rises in the woods, and is navigable about nine leagues upwards for sumaccas. On its banks grow the fruitful *Comarca*, to which the abundance of ants in this place very frequently do great mischief; and in the woods grow *Jacarandã*, *Vinhatico*, *Putumujú*, *Cergeira*, and other useful wood. Several small rivers flow into this, the *Rio de S. Anna*, *Rio Preto*, or *Mariricú*, and *St. Domingo* are the most worthy of notice; our troop arrived late at this spot, and were compelled to bivouac; but they were provided with fuel, woollen clothes, and store of provision, and a good spring of pure water. At the small village of *St. Matthew* we were conducted to the *Venda of Capitam Regente*, our papers, and the recommendations of the ministers, procured us every where a favourable reception.

The barra of the river *St. Matthew* is laid down in the chart by Arrowsmith at $18\frac{1}{4}$ degrees, and by others $18^{\circ} 50'$; which latter appears to be most correct, because at the spot given by the other, the river *Mucuri* falls into the sea. About eight leagues higher is the *Villa of St. Matthew* which lies in an unhealthy swamp, it contains about a hundred houses, and there are three thousand whites and men of colour by computation in this district. Amongst the latest villas which have been built, the most flourishing are *Comarca* and *Porto Seguro*. About eight leagues above the *Villa de St. Matthews*, is the *Quartel de Galveas* a cultivated spot; about half a league from the *Barra*, upwards, is the Indian Village of *St. Anna*, which contains about twenty Indian families living together, and of whom seventy heads pay tribute. Soon after we left *St. Anna* a Botocundo was killed, he was an aged man he had in his ears and in the upper lip large pieces of wood for ornament. Mon. Freyreis who again visited

this station in the month of February, took this head with him, which is now in the possession of the Professor Sparrman. In the woods on the borders of *St. Matthæus*, are a number of uncivilised Indians, the *Tapuyas* or *Gentios* who are continually at war with the whites.

On the north side roam the *Patachos*, *Cumanachos*, *Macacalis* called by the Portuguese, *Machacaris* and others onwards to *Porto Seguro*; *Botocundos* also in abundance possess the southern side, they are dreaded by other tribes, whom they treat as enemies, making them pay a small tribute for the support of the common cause. There are many plantations in a *fazenda* up the river belonging to them, but which are continually plundered. In the river *St. Matthew* is found a great rarity which is seldom found in rivers on the east coast, viz. the *Manati Piexe Boi* of the Portuguese. Much obscurity hangs over the natural history of this animal, nor has its formation been much inquired into. It is found in abundance here, it sometimes however makes for the sea and enters other rivers, it has been also caught at *Alcobaça*; it delights in lakes, or ponds overgrown with reeds and grass, and is taken with difficulty; The *Manati* gives abundance of oil, and its flesh is well liked by the natives; the drum of the ear is used as a wonder-working medicine and fetches a good price.

The river is well stored with fish, one from being found near *Piau*, is called the *Piau de Capim* or grass *Piau*, being found near those parts where grass is in plenty. The Indians kill this fish with their arrows, they go in a small light Canoes provided with a bow about three feet long, and arrows about the same length, made of a reed called *Taquara*, and barbed with wood or iron. About half a league from *St. Matthæus*, appears the small river *Guajintiba* which runs into the sea. At this place we were obliged to proceed by water about three leagues further to reach the *fazenda*. As *Itaúnas* which belong to the *Ovidor* of the *Comarca* of *Porto Seguro* Sen. *Marçalino da Cunha*. This small river has its banks decorated profusely with shrubs. its waters are dark brown like most of the small rivers in *Brasil*, and stored with fish; abundance of wild *Ananas* the species *Bromelia*, grows wild hereabouts, they are large, juicy and aromatic; the eatable sort do not grow wild in *Brazil*, but are abundant in the plantations, where they thrive. They here make brandy of them, and for the same purpose they use the fruit of the *Anacardium* and the *Cajueiro*, which grow in sandy districts all over the *Brazils*. The juice of the fleshy part of the fruit is a diuretic, and is esteemed in this country a specific for the *Syphilis*.

and dropsy; the kernel of the fruit is well known by the name of Cachu-nut. Towards evening our passage was very pleasant, we were no longer annoyed by mnsquitos, and through the thick umbrage of the leafy woods, the cheering beams of the rising full moon glittered. From afar at the fazenda, the drum of the blacks sounded, the negro slaves continue as much as possible, the customs of their native country, who according to the general agreement of those who have visited Africa, are every where fond of musical instruments, of which the drum is most esteemed. Wherever any number of negroes are employed in a fazenda, they paint and dress themselves on their feast-days in the way of their country, and enjoy their national dance. We found at the fazenda of As Raismas a young Puri brought from Ouvidor, who spoke Portuguese and possessed a good understanding, was well versed in his native language, and was able to declare the articles of their faith.

An Indian, who had accidentally joined us, conducted us northwards from *Itaunas*; he was provided with arms, and well acquainted with the road. We crossed two small rivulets, *Riacho Doce* and *Rio das Ostras*. The country round about exhibited a most rich appearance. *Os Lenzóes* (the white cloth,) next presented itself, so called from the white sand and grass, which is seen at sea, and has the appearance of cloth hanging out. The *Potachos*, who inhabit these regions, have been long at peace. About two leagues further is *Barra de Nova*, with a small village, the houses of which are built on a rising ground: here we rested during the heat of noon, and at the close of the day came to the mouth of the *Mucuri*, a river not rapid, but clothed with thick overshadowing woods, which, with numerous shrubs growing on its banks gave us repose and shelter from the heat. *Villa de S. José do Port Allegre*, usually called *de Mucuri*, is situated on the north bank of the river not far from its entrance. It contains thirty or forty houses, with a small chapel. The inhabitants are principally Indians; poor, and have but little employment. The town-clerk keeps a store, and sells brandy: there is a priest, and two of the inhabitants, in turn, act as judges, which is the general practice in the Brazils. Father *Vigario Mendes* is the only inhabitant who has a respectable fazenda; he has also *milch-kine*, a thing very rare in these parts. The minister of state the *Conde da Berea*, is a great landowner here, and brought a certain engineer from *Thuringen*, named *Kramer*, to direct and superintend the erection of a mill.

Almost all the fine species of wood of the whole coast are

here found together. But as this country was still in the possession of Patachos, and the wild beasts, it was not possible to erect the saw-mill; the minister ordered the high-bailiff of Porto Seguro to repair hither, to assemble the necessary hands for establishing a *fazenda*, and to protect the inhabitants against the Tapuyas. It accidentally happened that Captain Benta Lourenzo Vas de Abren Lima, an inhabitant of Minas Novas, who with twenty-two armed men had penetrated from the frontiers of the Capitania of Minas Geraes, along the banks of the Mercuri through the wilderness, had, just at this time reached the sea coast. His unexpected appearance in the Villa do Port Allegre, induced the minister to issue orders to furnish that enterprizing Mineiro with people requisite to form a passable road through those forests, in the route which he had taken. I had the pleasure to learn from this ingenious man the particulars of this bold and dangerous enterprise. He undertook at his own expense to cut a path through the woods which with several years hard labour he had accomplished with the assistance of twenty-two soldiers and armed volunteers. The Captain and his party were nearly starved in their progress through the wood, having nothing to subsist on but what chance threw in their way. Finally, however, they succeeded in their undertaking and entered Villa de Mucuri amidst the acclamations and *feux de joye* of the inhabitants.

It was now determined to open a road through these forests, in the track of the captain; and to this end they waited only the arrival of the high-bailiff. By degrees, the woodmen who were mostly Indians, arrived and were set to work.

Between the hills of *Minas Geraes* and the east side of this wild wilderness onwards, are still many hordes of *Aboriginal* savages to be met with, and which apparently will remain some time longer, independent of the Portuguese. Measures are taking to construct roads in various directions, in order to convey to this poor and newly-planted colony the products of *Minas*, and to obtain a communication with the principal towns and the sea. As the rivers afforded the speediest passage, it was determined to form these roads along them. One has been opened to *Mucuri*, another to *Rio Grande de Belmonte*, a third on the *Ilheos*, and two others are now constructing to *Espirito-Santo*, and to *Itapemirim* on to *Minas*. The woods round *Mucuri* are filled with the *Potachos* and *Botocudos*. Higher up there are more tribes of the *Tapuyas* in a distant desert, in the confines of which reside the well-shaped, comely *Maconis*, the *Malalis*, and others.

The *Capuchas*, or *Caposch-Indians*. *Cumanachos*, *Machacalis*, and *Panhamis*, or (*Paniamis*,) are found in the surrounding

woods. These last four tribes are strongly united with the *Patachos*, and, joined with the numerous *Botocudos*, secure the whole track. They appear to resemble each other in speech, customs, and occupations, and also in some measure to be related to each other; many of the *Maconis* who live distinct and separate have been baptized. The *Malalis* are a much weaker race, residing at a good distance from Rio Doce near to *Passanliã*. The speech of these two tribes differ widely from each other, the fifth race have the same shape, customs, and speech, and bore holes in their under lip in which they put a thin slip of cane which they tinge with (*Urucú*) red. They cut their hair short and round about the eyes; some also shave the tops of their heads: they, as well as the *Tapuyas*, paint their bodies red and black. They also believe thunder to be a supreme Being, which they call *Tapan*, a name which many tribes, and amongst others the *Puris*, as well as the coast tribe, the *Tupis*.

After staying seven days at this place we proceeded on our journey in the cool of the evening. The full moon shone serenely bright and sparkled on the still surface of the glassy sea, compensating for the dull uniformity of the road over the sandy plain. The great night-swallow* flew smoothly and swiftly over us, but too high to be brought down. At break of day we descried *Villa Vicoga*, which consists of about one hundred houses; beyond which we noticed the *Pamara*, or royal council-house: we rode thither, and found the *Ouvidor* in company with two sea captains, *Jozé da Trinitade*, and *Silveira Jozé Manoel de Araujo*, who were appointed by government to make astronomical observations, and form a chart of the coast.

Amongst the people belonging to the *Ouvidor*, were ten or twelve *Botocudos* from *Belmonte*, and a young *Machacali*, the sight of these *Botocudos* thrilled us with horror, never were such disgusting, strange, ill-favoured human beings ever before seen. Their original leader resembled a huge block of wood, he had his under lip and lap of his ear bored through, the lip was widely stretched forward, the ears hung down to his shoulders, like great wings, his brown body was covered with filth; they were, however, well familiarized to the *Ouvidor*, who had them constantly with him in his chamber, in order the

* This bird is a non-descript of this genus, which I have named *Caprimulgus Othereus*, from its raising itself to such a considerable height in the air, and skimming round like a hawk. It is twenty two inches long, has a rusty, reddish, dark-brown, and blackish-speckled feather. The upper feathers of its wing are a blackish brown, speckled, a blackish, brown-speckled band goes across its breast.

better to gain their confidence. Most of these Indians had suffered by the small pox with which they were marked all over in the body, and which, with the sickness that had followed, had so reduced their flesh as to add still more to their disgusting and revolting appearance.

As the Ouvidor recommended the journey to the Mucuri, we first proceeded to Caravellas and then to the river Alcobaca. The canoe glided smoothly along the Peruípe which winds easterly to the sea, in a large arm of which it falls in conjunction with the Caravellas. Cocoa-palms grow abundantly here and give the land a particularly fine character; the milk of the nut has a bitterish cooling taste, but it becomes flat and insipid when brought to Europe. One tree will produce a hundred fruits, which will fetch about five or six dollars. Some planters have from 300 to 400 of these trees, and render them a profitable object of cultivation. Along the shores, the whole way is covered with *Conocarpus* and *Aricennia*, the bark of which is sent to Rio de Janeiro. A tanner at Caravellas employs a number of slaves entirely for the purpose of collecting and carrying the bark of these trees, which is called *Casqueiro*. There is also another species, the *Mangue vermelha*, or *Conocarpus racemosa*, used in tanning, which does not grow so high, and also the egg-shaped leaf *Mangue banca*, (*Ariceneia tomentosa*,) the larger bears fruit like a plumb, and grows taller and more slender.

Our journey towards evening became very pleasant: we sailed from one creek to another, for between *Vicosa* and *Cavellas* the number of islands covered with the *Mangua*-tree, form a complete labyrinth. In these groves the screams of parrots were heard, they were of the species of the *Curica*, the *Psittacus ochrocephalus* of Linnæus, or *Amazonicus* of Latham. The singular roots of the *Mangi*-tree attracted our notice, which rise high from the trunk and bend down into the water, where they imbed themselves again in the earth and form a bow in every direction. On the bark of this tree a small sort of oysters and the speckled crab, (*Aratu*) are found in great quantities.

A great storm with heavy rain succeeding we were glad to proceed to Caravellas, and took up our residence with the *Ouvidor* in the house of the *Camara*. Caravellas is an important trading town of *Torto Seguro*, well built in regular streets with excellent shops, but is unpaved and overgrown with grass; a good church stands close to the *Caso da Camara*—Caravellas has a good trade in the natural productions of the district, such as *Mandiocca*-flour, Cotton-wool, &c. About 55,000 *Alquieras* of flour are sent annually from this

place which at five Patacas the Alquier amounts to about £25,000, and employs several ships to Pernambuco, Bahia, Rio de Janeiro, and other ports on the east-side. Thirty or forty small vessels are also in use so that frequent opportunities offer of sending letters or travelling by them to Rio.

We now proceeded some miles in a Canoe after which we continued our journey by land; towards evening we arrived at the *fazenda da Pindoba* belonging to Senhor Cardoso where we rested for the night. The country about here is uncultivated and full of impassable woods where neither plantation nor house is to be found. Near Pindoba we passed over a small brook and in a wood of thick interwoven trees echoing with the various notes of the feathered inhabitants, wholly unknown to us, we heard a strange, loud, and shrill note, followed by five or six others; these noisy inhabitants of the wood were in a company together, and as soon as one sent forth a note all the rest joined in chorus. Our huntsman felt a great desire to satisfy his eager curiosity and sprung directly into the thicket, but acting incautiously they cost him much trouble, but at last he succeeded in securing one of these screamers. This bird the *Mascicapa vociferans*, is of the size of a blackbird, of a disagreeable dirty ash-grey colour, about ten inches long, its upper feathers deep ash-grey, the under feathers lighter, breast and under the throat deeper, the ends of the feathers here and there yellowish.

The Portuguese give it the name of *Sebastiam* and in the province of Minas Geraes the forest thrush, *Sabia do mato virgem*. We soon after came to the river Alcobaça which is here but small; we arrived in the evening at the *fazenda* of Sen. Munis Cordero and on the north shore lies another belonging to the minister of state; the water is of a dusky colour but contains stores of fish amongst which is abundance of *Jacaras*; in the water grows the *Arum liniferum*.

Ponte do Gentio has a *fazenda* with a quantity of land belonging to the minister of state; here a Negro had killed one of the tribe of the Patachos in the wood; to be revenged they way-laid him and three of them laid him dead with their long arrows.

At present six families of the Ilhores inhabitants of the Azores reside here together with nine Chinese; some Negro slaves and a Feitor or Steward. The Chinese had been brought over by the government to Rio de Janeiro to cultivate tea, afterwards some were brought to Caravellos and others to this place to work as day-labourers, they are altogether lazy and at first did but little work; they live together in a small house; some of them have been converted and married to young In-

dians. They nevertheless keep up the customs of their native country; their feast days are observed with all due ceremonies, they eat heartily all sorts of poultry, and have little difficulty in finding subsistence in the woods. Their cane huts are very neat and clean; their beds are a perfect pattern of neatness, being provided with fine white hangings, hung in a most tasteful manner looped up with brass-hooks, these beds make a striking contrast with their poverty stricken reed huts in which they are placed.

The Chinese sleep on a fine reed mat, and rest their heads on a small round cushion, we saw them eat their dinner of rice after their Chinese fashion with two chop-sticks, they received us civilly when we visited them, and in but indifferent Portuguese, spoke in exalted terms of their beloved country, and how much superior it was to the Brazils. They opened their chests and shewed us some coarse porcelain and a great many fans which they had brought with them for sale, on arrival, and had kept with very great care. We penetrated into the woods with our huntsmen and with some lazy Mamelukes who lived at this place. A quantity of game was killed, amongst which was the great sloth (*Bradypus tridactylus*) of Linn.

Here we were very near having the misfortune to lose M. Freyreis; he went out in the morning to enjoy the chase, but did not return as usual at noon; evening came on, and darkness spread around, yet he did not appear. Our anxiety increased each minute, I sent people out in various directions to fire off their pieces, in order to give him signals where to find them. At last we heard at a distance the weak sound of a gun let off. We dispatched the Indians quickly with lighted torches towards the spot from whence the sound proceeded; fortunately they found the object of our deep anxiety, and brought him back safely to us at midnight. Fatigued and entirely exhausted he reached the *Fazenda*, and related to us his dangerous adventure; he was invited by a pleasing spot to follow the windings of a narrow path which suddenly broke off, he went farther and farther, and when he sought to return he had wholly lost the direction of the path. The day was now rapidly declining, and as he went further on he marked the trees, in order to find out where he had before been; however, all his endeavours to regain the path were fruitless, he at length ascended a hill, hoping by a more extended view better to find his way: this also was of no avail, on all sides he saw only the impervious untrodden wood. At last he came to a brook, and followed its course in the expectation of reaching *Alcabaca*, and by its shore of finding his way back to the *Fazenda*; this too failed him, the brook soon ending

in a swamp. His situation was now alarming to the highest degree, cut off from all means of subsistence and succour, heated by the fatigue of the ramble, drenched with the waters he had to wade through in the woods, he sunk to the ground. The gloom now came on, and he built himself a hut of palm-leaves; the musquitos teased him so cruelly that repose was impossible: added to which he was kept awake by the dread of visits from the savages and the wild beasts, the more so as he was not provided with the means of making a fire to scare them away; he had therefore resolved to wait with patience the returning day, although he had but mournful expectations to encourage him in the hope that he should then be able by some fortunate circumstance better to succeed, and being also but indifferently provided with powder and shot, he no longer had the means of protecting his life. In this terrifying situation he at length heard with inexpressible joy our signals at *Ponte de Gentio*. Revived by new hopes he now sprang up, and fired two shots in answer, which by the stillness of the night, as we before observed, we fortunately heard.

THE Editor of the London Journal of Voyages and Travels hastens to lay before his readers a translation of eight of the eighteen Chapters of which the Travels of Prince Maximilian are to consist, together with accurate copies of the plates connected with those chapters.

Seven of the chapters have not yet appeared in the original German, but were expected in a few weeks when our copy was lately transmitted from Hamburgh, the Public may therefore calculate on the completion of the work in the month after next, when a collection of Engravings will be given similar to those which accompany the present number.

The Map which his Highness has given with his first volume being confessedly copied from Mr. Arrowsmith's Map of South America affording no novelty to the English Public has not been copied.

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Captain Lawrence & his Party of Woodcutters





W. E. B. 1848

Paris in their Hut





W. Reed Sculp^d

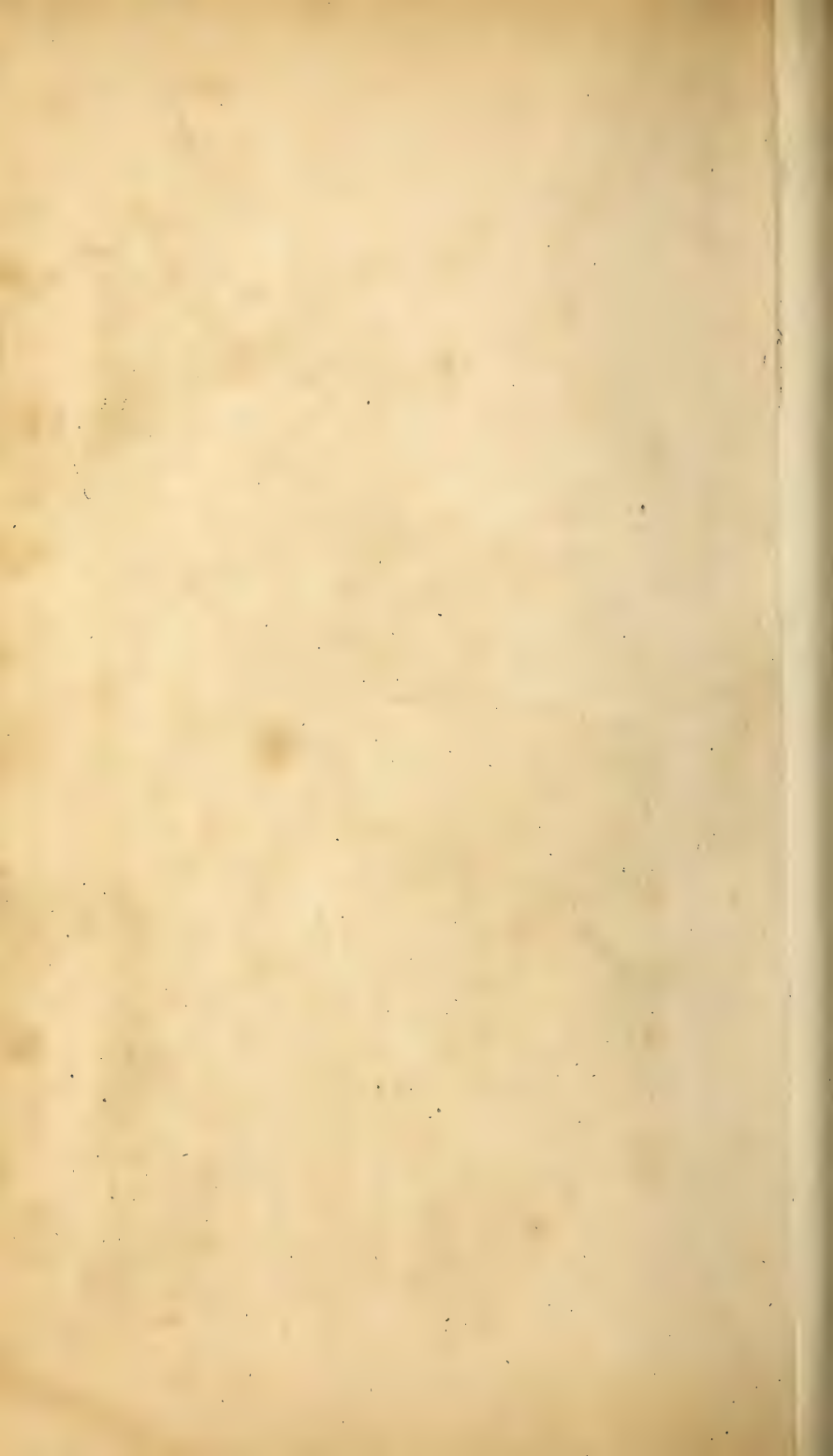
Paris in their Woods.

by Sir R. Phillips & Co. Bridge Street, Bristol

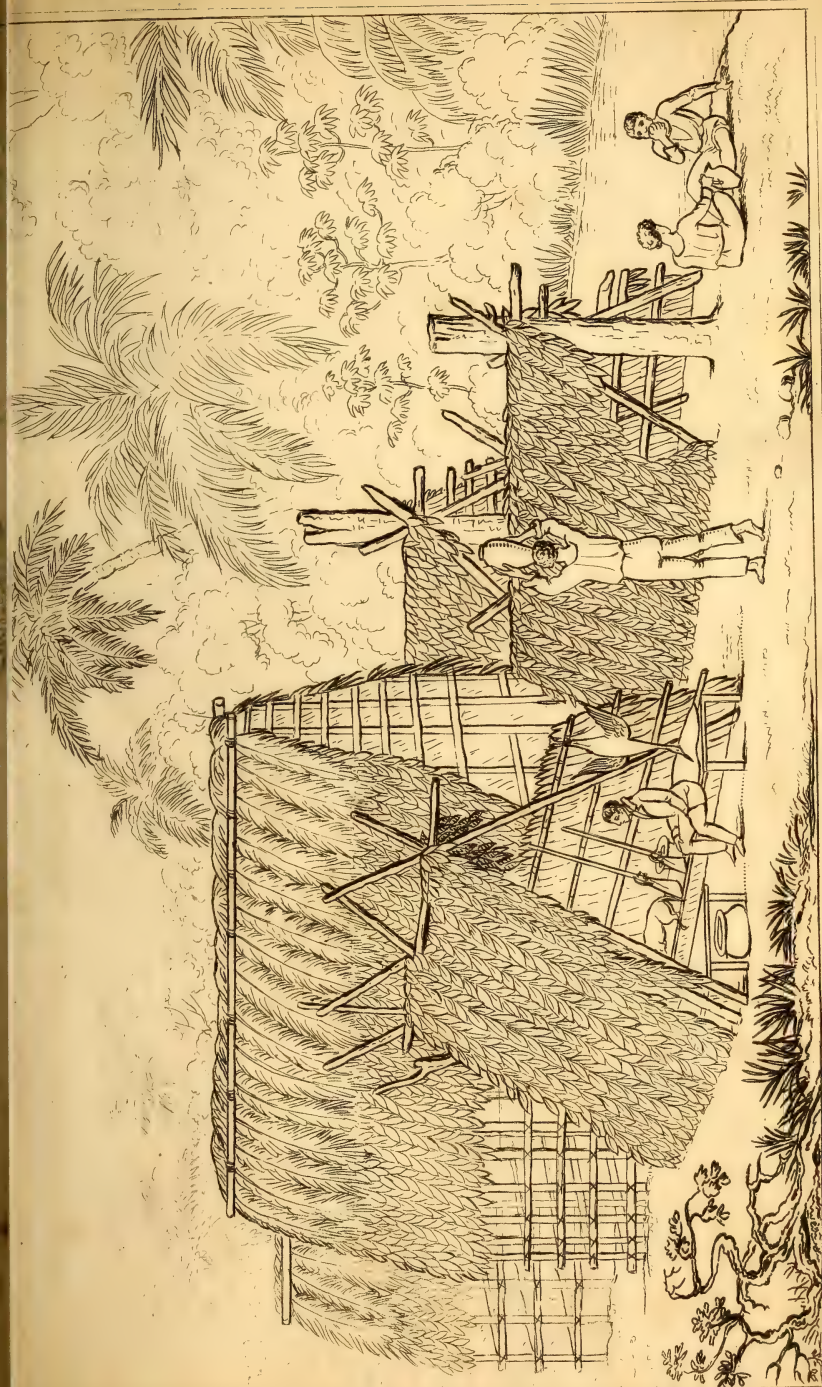


W. Road. Sculp.

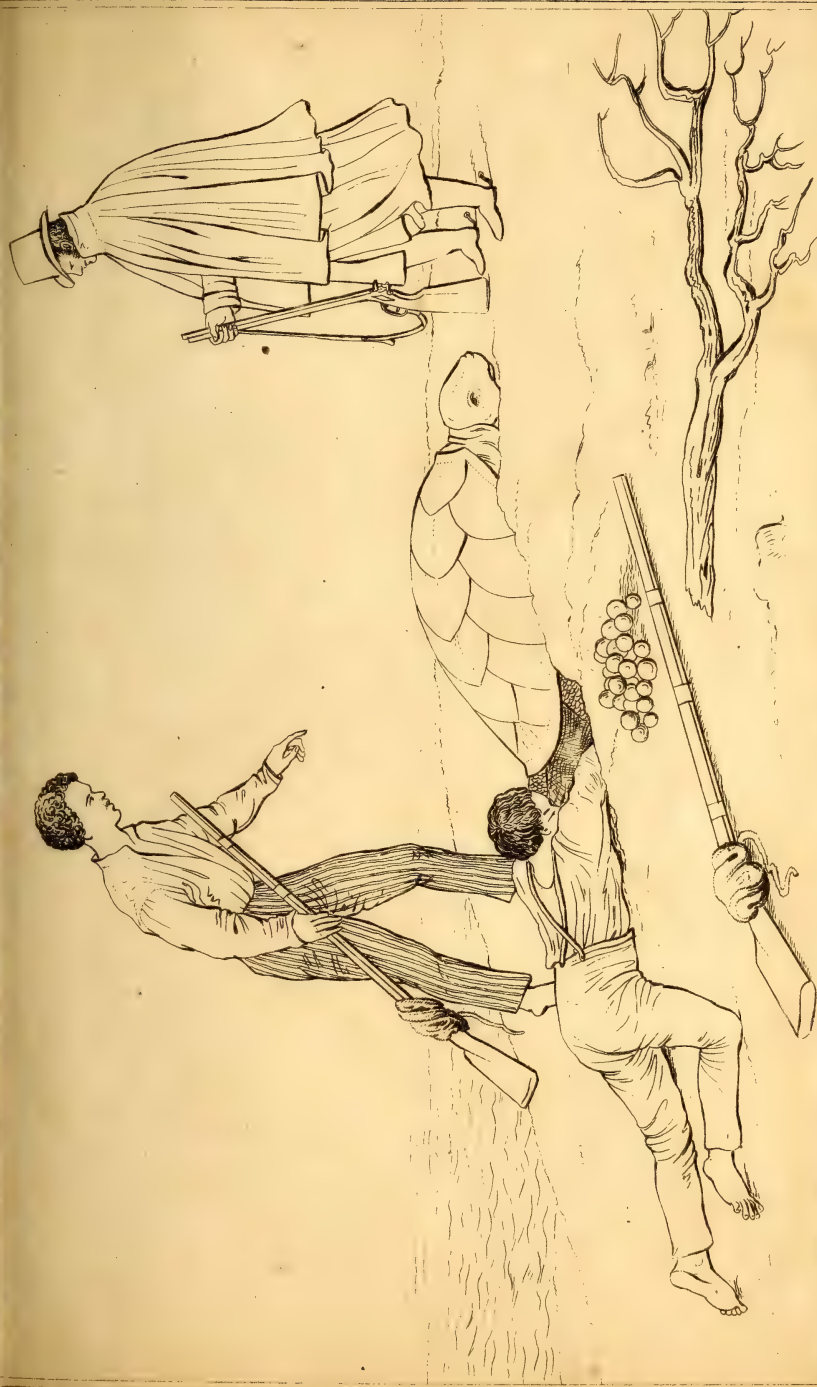
Brazilian Country-house at Pariba.



Temporary Huts at, Morro d'Arara.







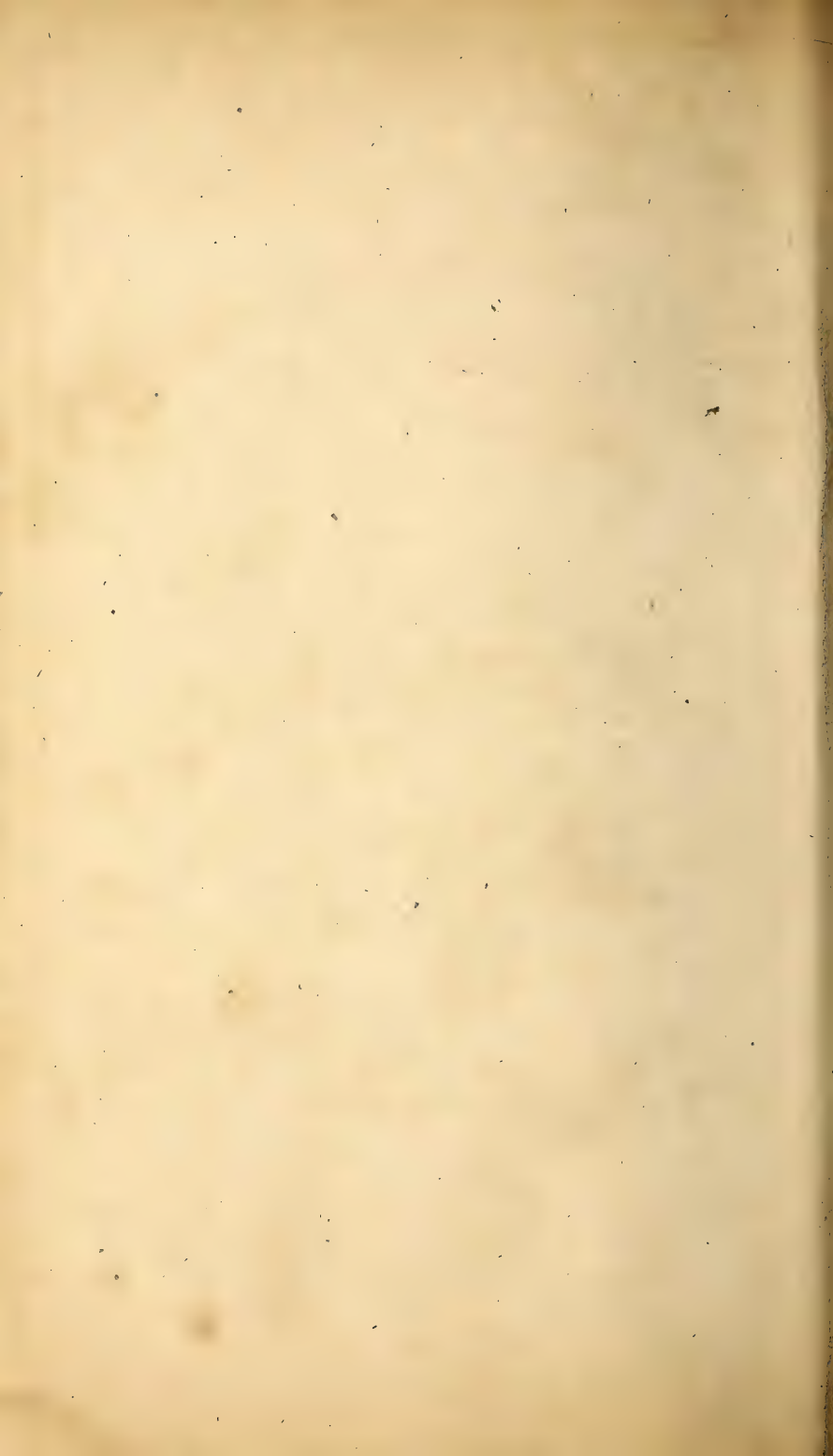
Tortoise Carrying Eggs on the Sea-Shore.





Soldiers at Simbaris in their Coats of Mail.

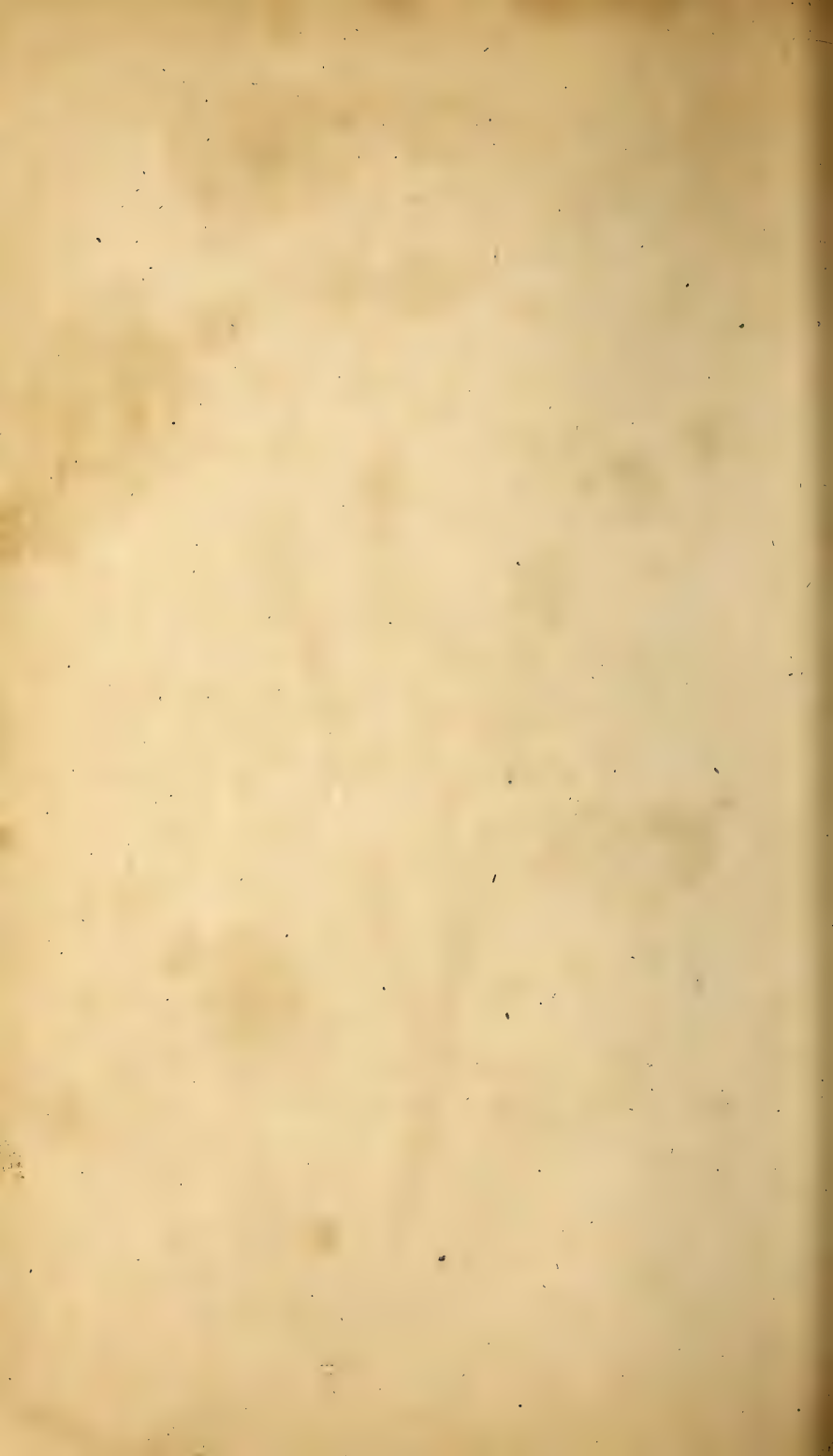
Engr. by Sir Rich. & Phillips & Co. Bridge St. Black-Grass.





Brazilian Hunters.

Engr. by Sir R. Phillips & Co. Bridge St. Black & White.





W. Read, Sc.

The Botovudo Chief Keregnatunk and his Family.

